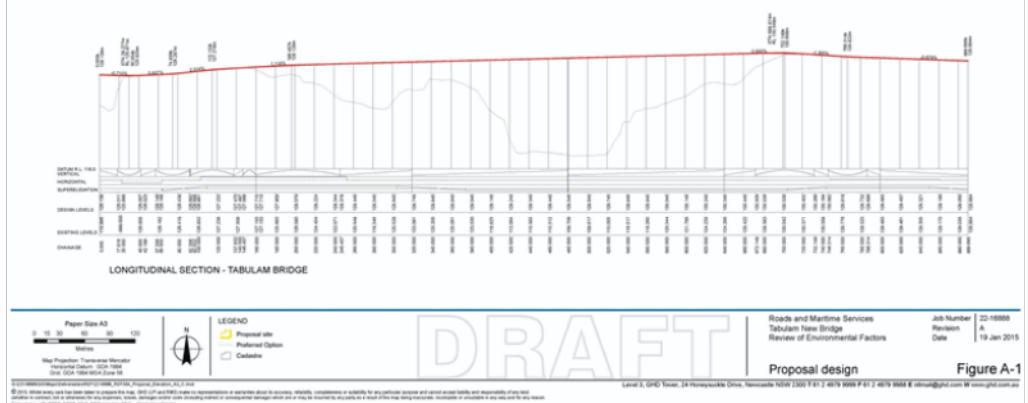


Appendix F

Aboriginal archaeological assessment

RMS ABORIGINAL ARCHAEOLOGICAL ASSESSMENT FOR THE NEW TABULAM BRIDGE FOR BRUXNER HIGHWAY: FINAL OPTION REPORT



TABULAM BRIDGE, TAMBULUM, NSW

PREPARED FOR NSW ROADS AND MARITIME SERVICES



Report Reference:

Robins, T., A. Piper and J. Towers 2014 *Aboriginal Archaeological Assessment for the New Tabulam Bridge for Bruxner Highway: Final Options Report (December 2014)*. Everick Heritage Consultants unpublished report prepared for RMS.

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- Jubullum LALC
- Uncle Harry Walker
- Uncle Lindsay Gordon
- West Bundjalung Native Title Applicants

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Executive summary

Everick Heritage Consultants (the 'Consultant') was commissioned by New South Wales Roads and Maritime Services to undertake an Aboriginal Archaeological Assessment in support of the proposed New Tabulam Bridge for the Bruxner Highway, Tabulam, NSW. This report assesses the potential for the proposed works to impact on Aboriginal cultural heritage (Figure 2).

The Tabulam Bridge has been scheduled by the New South Wales Government for replacement under the state-wide strategy initiated by RMS through the Timber Truss Bridge Heritage Strategy (July 2012) for the management of all remaining Timber Truss Bridges in the state of New South Wales. The Project area is identified in Figure 2 and includes lands adjacent to the west banks of the Clarence River located within the Tenterfield Shire LGA, and the east banks of the Clarence and the greater Township of Tabulam within the Kyogle Shire LGA. The scope of this assessment does not include the Batch Plant location shown in Figure 2.

The Project area is within the area administered for Aboriginal cultural heritage purposes by the Jubullum Local Aboriginal Land Council ('Jubullum LALC'). The Project area has also been subject to a Native Title Claim by the Western Bundjalung People (NSD2300/2011). The status of the Claim is that the Western Bundjalung have passed the Test of Registration but have yet to have their Native Title rights determined.

The brief provided to the Consultant was to produce an Aboriginal Archaeological Survey report consistent with the RMS *Procedure for Aboriginal Cultural Heritage Consultation and Investigation (PACHI) Requirements 2011*. Congruent with these requirements, this assessment has been designed to meet the requirements set out in the Office of Environment and Heritage (OEH) *Code of Practice for Archaeological Investigations in New South Wales (2010)*.

As part of a desktop study, Everick undertook searches of the relevant heritage registers. A search was conducted on Wednesday 07 August, 2013, of the Office of Environment and Heritage ('OEH') Aboriginal Heritage Information Management System ('AHIMS'). A total of five listings were identified within a 2km radius of the Project area, only one of which exists within 500m of the Project area (Section 5). A Site Inspection was conducted by the Consultant on Thursday 05 December 2013 to assess the potential impact of the final preferred road alignment would have on the Aboriginal Heritage located within the Project area.



RESULTS

- No known Aboriginal objects or places were identified within the Project area during the Site Inspection (Section 8)
- The Project area is within a significant archaeological and cultural landscape for Aboriginal cultural heritage, which where undisturbed is likely to contain Aboriginal Objects (Section 5 and 8)
- All of the Project area has seen significant ground disturbance through previous land clearing activities associated with cultivation, livestock and seasonal flood and associated erosion. (Section 5)
- Culturally significant places (historic birthing, occupation sites and ceremonial sites) are in close proximity to the Project area. The Aboriginal knowledge holders consulted in this assessment are of the opinion that the Project will not impact on these places.

CONCLUSIONS AND RECOMMENDATIONS

Impact mitigation methodology

It is the opinion of the Consultant that direct impact or harm to physical Aboriginal cultural heritage is unlikely to occur as a result of construction of any of the proposed route alignments.

Given the extensive ground disturbance of the project area, the lack of physical Aboriginal cultural heritage recorded during the survey and a review of the archaeology and land use patterns of the region, the Consultant is of the opinion that the commencement of PACHI stage 3 is not warranted. Congruent with the requirements of PACHI stage 2, Everick notes that while harm to physical Aboriginal cultural heritage is unlikely, the mitigation measures in 11.3 should be implemented to ensure that the potential for harm is minimised.

Mitigation measures

The following mitigation measures form part of the archaeological methodology for the minimisation of harm to Aboriginal cultural heritage values in the Project area. While we note that impact or harm to Aboriginal Objects is unlikely, the following cautionary recommendations should be implemented to protect Aboriginal cultural heritage values for the Tabulam area.



Recommendation 1: cultural inductions

It is recommended that the Proponent engage a representative of the Jubullum LALC or appropriate other knowledge holders to provide a cultural heritage induction to all plant operators undertaking initial ground disturbance within the project area. The induction should, as a minimum, cover:

- Basic legislative requirements, including fines for the destruction of Aboriginal cultural heritage
- A discussion on traditional Aboriginal culture, and why the management of Aboriginal cultural heritage is important to Aboriginal peoples
- An introduction on how to identify Aboriginal objects
- A description of portions of the Project area considered likely to contain Aboriginal Objects
- A review of the Find Procedures for the Project (See Recommendation 2).

Recommendation 2: finds procedure

It is recommended that if it is suspected that Aboriginal material has been uncovered as a result of development activities within the project area:

- Work in the surrounding area is to stop immediately
- A temporary fence is to be erected around the site, with a buffer zone of at least 10 metres around the known edge of the site
- An appropriately qualified archaeological consultant is to be engaged to identify the material
- If the material is found to be of Aboriginal origin, the Aboriginal community is to be consulted in a manner as outlined in the OEH guidelines: *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010).

Recommendation 3: Aboriginal human remains

It is recommended that if human remains are located at any stage during earthworks within the project area, all works must halt in the immediate area to prevent any further impacts to the remains. The location where they were found should be cordoned off and the remains themselves should be left untouched. The nearest police station, the Jubullum LALC and the OEH Regional Office, Coffs Harbour are to be notified as soon as possible. If the remains are found to be of Aboriginal origin and the police release the scene, the Aboriginal community and the OEH should be consulted as to how the remains should be dealt with. Work may only resume after agreement is reached between all notified parties, provided it is in accordance with all parties' statutory obligations.



It is also recommended that in all dealings with Aboriginal human remains, the Proponent should use respectful language, bearing in mind that they are the remains of Aboriginal people rather than scientific specimens.

Recommendation 4: notifying the OEH

It is recommended that if Aboriginal cultural materials are uncovered as a result of development activities within the project area, they are to be registered as Sites in the Aboriginal Heritage Information Management System ('AHIMS') managed by the OEH. Any management outcomes for the site will be included in the information provided to the AHIMS.

Recommendation 5: conservation principles

It is recommended that all effort must be taken to avoid any impacts on Aboriginal Cultural Heritage values at all stages during the development works. If impacts are unavoidable, mitigation measures should be negotiated between the Proponent, OEH and the Aboriginal Community.



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1. Introduction

1.1 Project purpose

Everick Heritage Consultants has been commissioned by New South Wales Roads and Maritime Services to assess known and potential Aboriginal archaeological values for the proposed Tabulam New Bridge, Tabulam, NSW (Figure 2). The Tabulam Bridge has been scheduled by the New South Wales Government for replacement under the state-wide Timber Truss Bridge Heritage Strategy (July 2012) initiated by RMS.

1.2 Project background

The Tabulam Bridge is located in the village of Tabulam, New South Wales, and forms a key section of the Bruxner Highway (HW16) as the single crossing of the Clarence River (Figure 2). The Bruxner Highway forms the main state road connecting coastal and inland townships over 400km (Figure 1). The highway stretches from Bruxner Road just south of Goondiwindi and connects Western New South Wales with the townships of Tenterfield, through to Casino and Lismore, and links with the Pacific Highway on the outskirts of Ballina. It is proposed that the New Tabulam Bridge for the Bruxner Highway will:

- Improve traffic efficiency
- Enhance road safety
- Support regional and local economic development
- Provide cost efficient and sustainable infrastructure
- Minimise environmental impacts associated with main transportation roads.

For the purposes of this study the project area (Figure 2) has been determined to comprise the final proposed alignment with a buffer zone of 50m, inclusive of the existing Tabulam Bridge site. The land surrounding the Bridge location is currently zoned as Primary Production Rural Lands in the Tenterfield and Kyogle LEP's. However, the Clarence River itself is classified as natural waterway.

1.3 Project scope

The proposal involves the construction of a new bridge over the Clarence River and the removal of the existing bridge. The new alignment would extend from the most western overflow structure, west of the Clarence River, before crossing the river approximately 50 metres at the widest point downstream and on a slight angle to the



existing bridge, converging and re-joining the highway at the Clarence Street intersection. The proposal design includes:

- Construction of a new bridge over the Clarence River
- Alterations to the alignment of the road approaches to the east and west to link with the new bridge
- Retention of Overflow Bridge No. 1 and No. 2 to manage floodwaters and protect threatened fauna using the bridges as habitat
- Creation of a new intersection with Clarence River Road
- Reconstruction of the highway intersections with Clarence Street and Tabulam Road to the east of the Clarence River
- Demolition of the existing bridge.

The proposal would be completed in a staged manner with the new bridge being constructed in the first phase and after diversion of traffic onto the new bridge, removal of the existing bridge. Existing road approaches would also be removed and rehabilitated. Construction would require the establishment of a temporary site compound on the eastern alignment and a temporary concrete batching plant on land west of Tabulam Road immediately north of the Tabulam Rivulet.

For the Bridge Demolition, site preparation would involve:

- Installing project erosion and sediment controls
- Minor earthworks for the preparation of the compound area (north side only) and stockpile areas (on both sides of the bridge)
- Modifying the proposed access track to facilitate crane access
- Using river gravel and stone to create a pad to support the crane and bridge support props (north- eastern and western). The pad would extend from the northern bank approximately half way across the creek, leaving at least four metres of the channel unaffected
- Installing precast concrete, heavy timber or steel load spreading foundation pads on the gravel pad
- Installing pier strengthening or propping and steel girder support towers to carry the weight of the section of the bridge supported by trusses
- Constructing a scaffold access tower for personnel access to deck (if required)
- Installing transverse bracing and strengthening to trusses as required by Design Engineer
- Slings a protective net beneath the main span timber truss to prevent any falling debris reaching the creek.

Demolition of the bridge would involve:



- An assessment of any potential lead paint or other potentially hazardous waste
- Dismantling each truss using the crane and personnel on the deck with lanyards or on an access boom lift
- Removing the trusses using the crane
- Strategically cutting the bridge to enable removal in segments
- Dismantling and removing the northern portion of the spans
- Removing the northern piers via excavation and cutting of the piers
- Removing and reinstating the northern abutment using an excavator
- Transferring the crane to southern side of the creek by walking across new bridge
- Dismantling and removing the southern portion of the spans
- Removing the southern piers via excavation and cutting of the piers
- Removing and reinstating the southern abutment using an excavator.

Construction of the bridge would involve:

- Foundation works: including bored piers with permanent casing socketed into rock through the upper strata (clays and gravels). The four river piers would need to be constructed using temporary platforms within the river for access. Sediment and water quality measures would be installed to minimise impacts on water quality.
- Substructure / road approaches: piers may be slip formed where possible, jump formed or precast and post-tensioned with appropriate temporary access required at the river piers for concrete pumps or lifting equipment.
- Superstructure: consists of fifty-four individual precast prestressed super-T girders of 32 metres length. The girders would be delivered to site and either stored prior to placement or directly placed on the bridge. The girders would be lifted into place via heavy lift cranes or dual lift cranes from specially constructed crane pads within the river banks. Delivery of the girders from storage to the river would require access road construction within the river banks to cater for these long and heavy loads.
- Work over the waterway: temporary work access along the bridge alignment across the full river width would need to be established. There are three main construction activities are bored piling works, Substructure construction and Girder erection. Large construction elements would be lifted and manoeuvred using a combination of bankside and work platform cranes.

Rehabilitation of the site would involve:

- Minor earthworks and landscaping to reform the land
- Reinstating the pad used by the crane and support props



- Revegetation as required.

In order to assess the potential Aboriginal cultural heritage constraints for the Project, the final alignment presented by Roads and Maritime (Figure 2) has been subject to an external preliminary assessment incorporating both a desktop analysis and a site inspection, congruent with Stage 2 of the Roads and Maritime *Procedure for Aboriginal Cultural Heritage Consultation and Investigation Requirements 2011* ('PACHI') requirements.

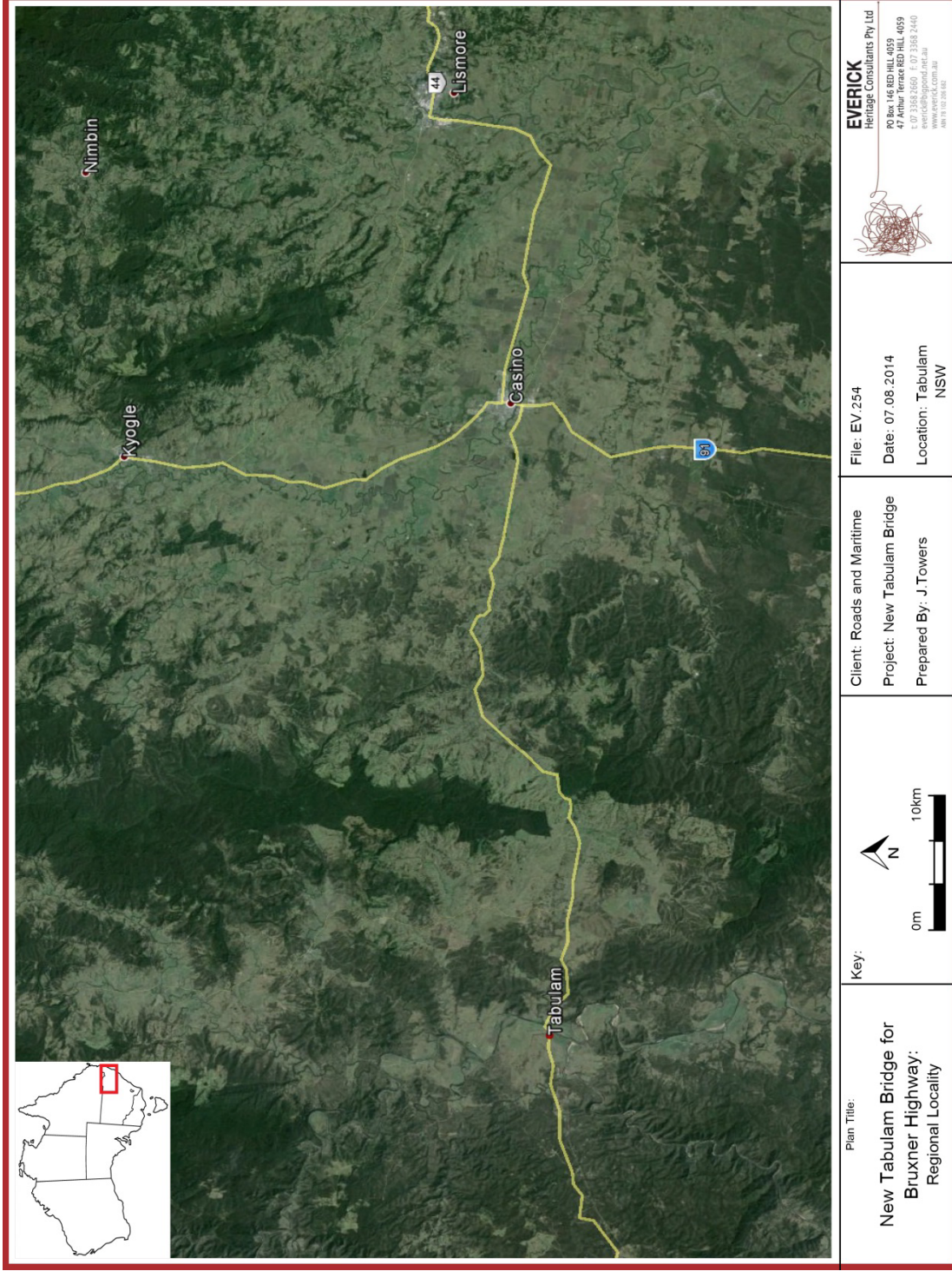
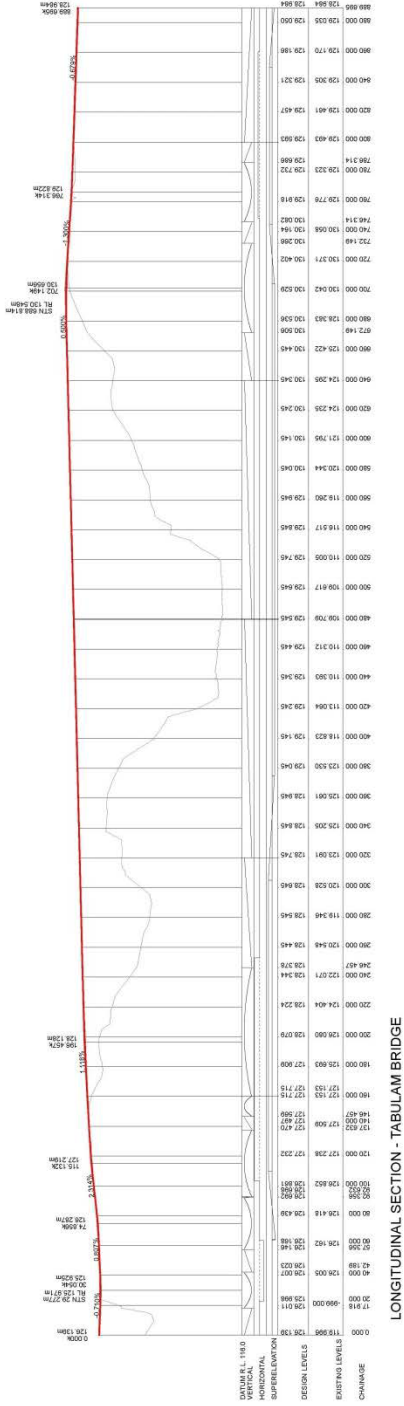
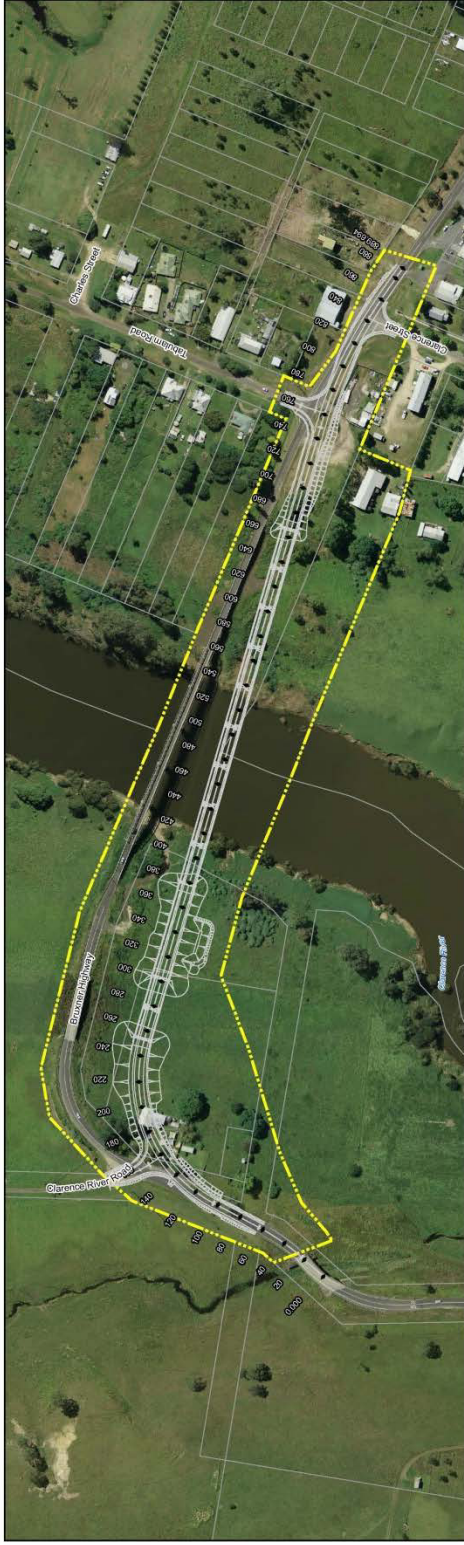


Figure 1 Tabulam regional locality: aerial imagery of the regional context.



LONGITUDINAL SECTION - TABULAM BRIDGE

Paper Size A3
0 15 30 45 60 75 90 105 120
Metres

Map Projection: Transverse Mercator
GDA 1984 MGA Zone 56

LEGEND

- ▬ Proposed Alignment
- ▬ Preferred Option
- ▬ Candidate

N

Job Number: 22-16886
Revision: A
Date: 19 Jan 2015

Roads and Maritime Services
Tabulam New Bridge
Review of Environmental Factors

Figure A-1
Proposal design

Level 51, GH Tower, 24 Honeyucke Drive, Newcastle NSW 2300 T 612 4979 9999 F 612 4979 9968 E info@ghd.com W www.ghd.com.au

Figure 2 Project Area : the New Tabulam Bridge for the Bruxner Highway alignment



2. Legislative and planning context

In relation to cultural heritage, the proposed works primarily fall within the ambit of the *National Parks and Wildlife Act 1974* (NSW). The consent authority for impacts to an Aboriginal cultural heritage will be the Office of Environment and Heritage (OEH). The information below lists the legislative and policy framework within which this assessment is set.

2.1 Native Title Act 1993 (Cth)

Under Section 3 of the Native Title Act 1993 (Cth), the main objectives of the legislation are to:

- Provide for the recognition and protection of Native Title
- Establish ways in which future dealings affecting Native Title may proceed and to set standards for those dealings
- Establish a mechanism for determining claims to Native Title
- Provide for, or permit, the validation of past acts, and intermediate period acts, invalidated because of the existence of Native Title.

Native Title is the recognition by Australian law that some Indigenous people have rights and interests in their land which come from their traditional laws and customs. Native title rights may include the right of Indigenous people to:

- Live on the area
- Access the area for traditional purposes including camping or ceremonial activities
- Visit and protect important places and sites
- Hunt, fish and gather food or traditional resources including water, wood and ochre
- Teach law and custom on country (National Native Title Tribunal, 2011).

Where developments (including large public infrastructure projects such as the present project) may impact on these rights, a right to be consulted and negotiate will often arise, provided Native Title Rights have not otherwise been validly extinguished.



2.2 The National Parks and Wildlife Act 1974 (NSW)

The *National Parks and Wildlife Act 1974* (NSW) ('NPW Act') is the primary legislation concerning the identification and protection of Aboriginal cultural heritage. It provides for the management of both Aboriginal Objects and Aboriginal Places. Under the NPW Act, an Aboriginal Object is any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area, regardless of whether the evidence of habitation occurred before or after non-Aboriginal settlement of the land. This means every Aboriginal Object – regardless of its size or seeming isolation from other Objects – is protected under the Act.

An Aboriginal Place is an area of particular significance to Aboriginal people which has been *declared* an Aboriginal Place by the Minister. The drafting of this legislation reflects the traditional focus on Objects, rather than on areas of significance such as story places and ceremonial grounds. However, a gradual shift in cultural heritage management practices, towards recognising the value of identifying the significance of areas to Indigenous peoples beyond their physical attributes, can be seen in local and State government policies (such as the ACHCR Guidelines discussed below).

Under Section 86 of the NPW Act, it is an offence to disturb, move, remove or destroy an Aboriginal Object without the consent of the Chief Executive of the OEH. This consent can be either to Investigate (Section 87) or Destroy (Section 90). If a land user is seeking a Consent to Destroy, best practice is to generally seek a Section 87 permit first, and then demonstrate to the OEH the minimal significance of the site before applying for a Section 90 Consent. Before applying for Consent under Section 87 or 90, the applicant must undertake broad-based Aboriginal community consultation in accordance with the ACHCR guidelines discussed below.

2.3 Due diligence code of practice for the protection of aboriginal objects

The Due Diligence Code has been applied to this assessment, and is addressed in Section 10 of this assessment. It operates by posing a series of questions for land users before they commence development. These questions are based around assessing previous ground disturbance. An activity will generally be unlikely to harm Aboriginal Objects where it:

- Will cause no additional ground disturbance
- Is in a developed area
- Is in a significantly disturbed area.



Where these criteria are not fulfilled, further assessment for Aboriginal cultural heritage will typically be required before commencing the activity.

2.4 The ACHCRP (2010)

The *Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010)* (ACHCRP) provide an acceptable framework for conducting Aboriginal community consultation in preparation for impacts to Aboriginal cultural heritage. Proponents are required to follow them where a Project is likely to impact on cultural heritage and where required by Council. It is recommended by the OEH that all cultural heritage assessments involve this level of consultation, although it is not strictly a requirement unless it meets the above criteria.

The ACHCR Guidelines typically take a minimum of 90 days to complete. However, in complicated Projects this period may need to be extended by several months. The Guidelines require public notice of the assessment, preparation of a proposed methodology, undertaking site meetings and excavations where required, the production of a draft report, which is distributed to the registered Aboriginal groups and the production of a final report. Although not strictly required, a thorough consultation process will treat the ACHCR Guidelines as a minimum standard of community consultation. Generally, consultants must go to further effort to identify the significance of a given site to the Aboriginal community. This will likely include undertaking additional site inspections if requested by Aboriginal stakeholders, fully resourcing the community by providing copies of past archaeological and environmental assessments in the region and meeting with community members to ascertain their opinions of the site.

2.5 The Kyogle Local Environmental Plan 2012

The Kyogle Shire LEP 2012 provides statutory protection for items already listed as being of heritage significance (Schedule 5), items which fall under the ambit of the Heritage Act 1977 (NSW) and Aboriginal Objects under the *National Parks and Wildlife Act 1974* (NSW). It ensures essential best practice components of the heritage decision making process are followed.

For listed heritage items, relics and heritage conservation areas, the following actions can only be carried out with the consent of the Kyogle Shire Council:



- Demolishing, defacing, damaging or moving a heritage item or a building, work, relic, tree or place within a heritage conservation area
- Altering a heritage item or a building, work or relic within a heritage conservation area by making structural changes to its exterior
- Altering a heritage item or a building, work or relic within a heritage conservation area by making non-structural changes to the detail, fabric, finish or appearance of its exterior, except changes resulting from any maintenance necessary for its ongoing protective care, which does not adversely affect its heritage significance
- Moving a relic, or excavating land for the purpose of discovering, exposing or moving a relic
- Erecting a building on, or subdividing, land on which a heritage item is located or which is within a heritage conservation area.

In addition, Council may not grant development consent without considering whether the lands contain potential Aboriginal archaeological deposits (Part 5.10).

2.6 The Tenterfield Local Environmental Plan 2013

The Tenterfield Shire LEP 2012 provides statutory protection for items already listed as being of heritage significance (Schedule 5), items which fall under the ambit of the Heritage Act 1977 (NSW) and Aboriginal Objects under the National Parks and Wildlife Act 1974 (NSW). It ensures essential best practice components of the heritage decision making process are followed. For listed heritage items, relics and heritage conservation areas, the following actions can only be carried out with the consent of the Tenterfield Shire Council:

- Demolishing, defacing, damaging or moving a heritage item or a building, work, relic, tree or place within a heritage conservation area
- Altering a heritage item or a building, work or relic within a heritage conservation area by making structural changes to its exterior
- Altering a heritage item or a building, work or relic within a heritage conservation area by making non-structural changes to the detail, fabric, finish or appearance of its exterior, except changes resulting from any maintenance necessary for its ongoing protective care, which does not adversely affect its heritage significance
- Moving a relic, or excavating land for the purpose of discovering, exposing or moving a relic



- Erecting a building on, or subdividing, land on which a heritage item is located or which is within a heritage conservation area.

In addition, Council may not grant development consent without considering whether the lands contain potential Aboriginal archaeological deposits (Part 5.10).

2.7 The North Coast Regional Environmental Plan (NCREP 1988)

The *North Coast Regional Environmental Plan 1988* ('NCREP 1988') recognises the importance of regionally significant heritage items and places to the State of NSW. It provides statutory protection for a select number of state and regionally significant heritage items and places in northern NSW. A 'heritage item' means a building, work, relic, tree or place of heritage significance to the North Coast Region specified as described in Schedule 2 or 3 of the NCREP 1988. For these items, the Tweed Shire Council remains the consent authority. Under the NCREP 1988, Council must consider:

- The views of the Heritage Council
- The heritage significance of the item to the State or region
- The extent to which the carrying out of the development would affect the heritage significance of the item and its site
- Whether the setting of the item, and in particular, whether any stylistic, horticultural or archaeological features of the setting should be retained
- Measures taken to conserve and preserve the heritage item, including where appropriate, any conservation plan
- Whether the item constitutes a danger to the users or occupiers.

The main difference between the NCREP 1988 and other Council planning controls is that it focuses on regional significance rather than local significance. It also involves referral to the NSW Heritage Council, regardless of whether the item is on the NSW Heritage Register.

2.8 The Roads and Maritime procedures for Aboriginal cultural heritage investigation (2011)

The Roads and Maritime *Procedures for Aboriginal Cultural Heritage Investigation (2011)* (PACHI) outline the internal process the Roads and Maritime adopts in assessing potential impacts to Aboriginal heritage. The PACHI



(Roads and Maritime 2011) dovetails into the NSW legislative requirements such as the due diligence code and ACHCRP consultation guidelines. It allows Roads and Maritime project managers to adopt consistent heritage assessment and management practices state wide.

This report falls within stage 2 of the PACHI, the primary purposes of which is to identify Aboriginal Objects and places as well intangible heritage features within the Project area through a preliminary site survey with the relevant Local Aboriginal Land Council (LALC) and/or native title holders/claimants. Stage 2 is jointly coordinated by the nominated project manager and Aboriginal cultural heritage advisor and has six primary actions:

1. Aboriginal Stakeholders, being Local Aboriginal Land Council (LALC); native title holders/claimants and Registered Traditional Owners of the Project area are identified.
2. Aboriginal Stakeholders are engaged to conduct a survey of the Project area to identify known and potential Aboriginal cultural heritage features.
3. An Archaeologist is engaged to prepare an Aboriginal Archaeological Survey Report which is to detail the preferred route or alignment based on the results of the survey, and to provide suitable and acceptable mitigation measures where impact to heritage cannot be avoided.
4. Aboriginal Archaeological Survey is to be conducted by the Aboriginal Stakeholders and the Archaeologist.
5. Aboriginal Stakeholders provide a Cultural Heritage Survey report to RMS and the archaeologist. The report is to record Aboriginal cultural heritage values identified during the survey of the Project area.
6. The Archaeologist is to provide an Aboriginal Archaeological Survey Report to RMS, the primary purpose of which is to clearly identify if Aboriginal cultural heritage values identified during the survey of the Project area will be impacted by the Project, and to provide a method for the implementation of mitigation measures for said heritage.

Where the outcomes of stage 2 are such that the Aboriginal cultural heritage advisor and senior environmental officer believe Aboriginal heritage will be impacted by the project, stage 3 of the PACHI will apply (Roads and Maritime 2011:20). Where the outcomes of stage 2 are such that the Aboriginal cultural heritage advisor and senior environmental officer believe Aboriginal heritage will not be impacted by the project, part 6 Approvals are not required and works may proceed (Roads and Maritime 2011:20). Roads and Maritime policy states that project works which involve ground disturbance must not be commenced until stage 1, and if necessary stage 2 have been completed (Roads and Maritime 2011: 20).



2.9 Aboriginal Land Rights Act

Lands immediately to the south west of the proposed alignment have been the subject of a claim under the Aboriginal *Land Rights Act 1983* (NSW) (Lot 7007 on DP1068757). The purpose of the Act is to:

- provide land rights for Aboriginal persons in New South Wales,
- provide for representative Aboriginal Land Councils in New South Wales,
- vest land in those Councils,
- provide for the acquisition of land, and the management of land and other assets and investments, by or for those Councils and the allocation of funds to and by those Councils,
- provide for the provision of community benefit schemes by or on behalf of those Councils.

The proposal boundary has been amended to avoid impacting on Lot 7007 on DP1068757.

3. Environment and landscape context

3.1 Environment locality

The project area is situated on the eastern and western banks of the Clarence River. The main village of Tabulam is located on the eastern bank and is immediately south of the project area, with some dwellings and buildings being located to the north. The village of Tenterfield is located approximately 20 km to the west and Casino is approximately 50 km to the east.

The project area is situated within a low undulating fluvial valley system dominated by the Clarence River, with elevations to the east and west.

3.2 Geology and soils

Detailed mapping and soil testing are still in the process of being taken and collated, so although there are detailed studies available of the nearby Casino region in regards to soil landscapes, Tabulam is out-side of this study area.



Based on the available information, the geology of the Tabulam is Clarence-Moreton Basin sandstones interbedded with shale of Triassic age. The landform elements within the project area are consistent on both sides of the Clarence River, being characterised as either;

- River terraces – narrow alluvial flood deposits, rise from the river to the flood plains on the eastern and western extremities of the project area
- Overflow channels, channels or depressions between river terraces through which flood waters would flow and in which water would pool during wet periods.

Each of these land form elements will inform the predictive archaeological model, and therefore influenced the survey strategy.

3.3 Vegetation

The project area has been primarily cleared of vegetation for agriculture or urban development. Original vegetation for the region would likely have been open riparian woodland, closed grasslands and open-forests.

Current vegetation includes grasses suitable for cattle grazing, with some regrowth Eucalypt species, with introduced garden plants and trees around the residential buildings. Under the OEH 'Code of Practice', certain landscape features are well documented and recognised as containing high potential for archaeological sites. Floodplain areas and levee banks are amongst these known landscape features. The likelihood of Aboriginal people utilising these resource rich areas is extremely high. The historic sources support this understanding, particularly in the Tabulam and Casino area, with campsites documented in the ethnographic records existing for these areas (Section 5).

4. Aboriginal community consultation

4.1 Traditional owner knowledge

The Aboriginal community are the primary determinants of the significance of their cultural heritage. Members of the Aboriginal community have been consulted, and will continue to be consulted, with regard to their concerns not only about known archaeological sites in the region, but also about cultural values such as areas with historic and spiritual significance, and other values relating to flora and fauna of the area.



The Project area is the subject of a Registered Native Title Claim by the Western Bundjalung people. The claim has yet to be determined. Under NSW legislation, Native Title claimants (as opposed to holders) have no additional status in cultural heritage consultation than other Aboriginal persons in the region. However, Roads and Maritime have a policy of requiring that Native Title claimant groups are consulted during this stage of the assessment.

4.2 Meeting with the Jubullum LALC

Initial consultation with the Jubullum LALC was conducted by Roads and Maritime Aboriginal cultural heritage officer Andrew Whitton. Everick consulted with Jubullum LALC Sited Officer Alex Torrens on Thursday 5 December 2013. A report was prepared and submitted to Roads and Maritime following the consultation.

4.3 Meeting with the West Bundjalung Native Title Applicants

A meeting and inspection of the Project with West Bundjalung Native Title Applicants and local Elders was held on Monday 3 February 2014. In attendance were Uncle Harry Walker (Elder / Knowledge Holder), Uncle Lindsay Walker (Elder / Knowledge Holder), Leonard Gordon (West Bundjalung Native Title Applicant) and Darren Freeburn (West Bundjalung Native Title Applicant). Also in attendance were Tim Robins, Scott Smith and Graham Purcell (Aboriginal Heritage Advisor – Roads and Maritime). A draft survey report was prepared by the meeting attendees, and was considered in preparation of this report. Uncle Harry Walker was identified as the primary knowledge holder for the region. Uncle Harry was of the opinion that the northern route options (as proposed at the time) were of the potential to impact on an area known as the 'Big House' (see Section 8.3). Uncle Harry Walker was of the opinion that the northern options were unsuitable given the potential to impact on the former location of the Big House, whilst the southern options (the current Project area) were suitable.

4.4 Ongoing consultation

A subsequent meeting / site inspection for Thursday 13 February 2014 was arranged via Native Title Services Corporation with representatives of the Western Bundjalung. Mr Terrance Robinson and Mr Tim Torrens were in attendance. Both Mr Robinson and Mr Torrens supported the previous position of Uncle Harry Walker perceiving the southern alignments as preferable, as the northern options were unsuitable due to the potential impacts to the site of the Big House.



A workshop was held by Roads and Maritime on Tuesday 18 February 2014 with interested Stakeholders in the project to further determine the most appropriate alignment for the project. Uncle Harry Walker attended the workshop for some of the day. He reiterated the objection to the northern alignment proposal. The southern alignment (the current project area) was nominated as his preferred route.

5. Desktop review

The archaeological and cultural landscape within which the project area is situated is one of generally high significance to the Aboriginal people of the Clarence and Richmond River Valley Regions. Prior to European settlement, this was an area rich in resources. It was known to be a favourite camping place, and ceremonial and sacred sites are relatively common in the immediate region. The cultural context in the region is of critical importance to assessing potential Aboriginal cultural heritage constraints to the Project.

5.1 The OEH Aboriginal heritage information management system

Care should be taken when using the AHIMS database to reach conclusions about site prevalence or distribution. For example, a lack of sites in a given area should not be seen as evidence that the area was not occupied by Aboriginal people. It may simply be an indication that it has not been surveyed, or that the survey was undertaken in areas of poor surface visibility. Further to this, care needs to be taken when looking at the classification of sites. For example, the decision to classify a site an Open Campsite containing shell rather than a Midden can be a highly subjective exercise, the threshold for which may vary between archaeologists.

A search was conducted on Wednesday 7 August, 2013 of the OEH Aboriginal Heritage Information Management System (AHIMS service number 107790) over a 1km zone surrounding the project area. The search returned five listings for Aboriginal cultural heritage sites within the search zone (Figure 3 – note only the closest three sites are shown). The search results have been provided in Appendix B. None of the registered AHIMS sites are within the direct path of the proposed final route presented to the Consultant (Figure 3).

The burial site named Tabulam 1 (03-6-0009) was registered with NSW National Parks and Wildlife Service in 1967. According to the image (Figure 3) provided by OEH the site is 'place marked' as being located in Lawrence Street at the base of the ridge slope at the eastern end of the project area and the Village. The description by Isabel McBryde from an eyewitness Police source places the burial site in a cave "...on the north western slope of the ridge which overlooks the township, about half a mile from the Clarence River and near the route of the



old Tabulam Casino Road...” (McBryde 1974:147). A detailed description of the contents of the cave is also given.

The ridge slope containing the burial location comprises the eastern sector of the project area bounded by the Bruxner Highway, Lawrence Street and the ridge crest in an approximate line through the rubbish tip. A brief inspection of the ‘place marked’ location (31-7-2013) found it to be between houses on the lower western side of Lawrence Street.

Whether the position has been ‘ground truthed’ by OEH officers will need to be confirmed and further field investigation and Aboriginal consultation will be required to attempt to establish the precise location of the burial site and the significance of the immediate area to the Aboriginal community. Burials are usually considered as culturally significant to the Aboriginal community, whether they remain ‘in situ’ or not.

5.2 Heritage register searches

The following heritage registers were accessed on Monday 22 July 2013 for Aboriginal places located in Tabulam within the Kyogle and Tenterfield Shire LGAs:

- Kyogle Shire Local Environment Plan 2012: Contains no Aboriginal Heritage listings within close proximity to the Project area.
- Tenterfield Shire Local Environment Plan 2012 - Contains no Aboriginal Heritage listings within close proximity to the Project area.
- The World Heritage List: Contains no Aboriginal Heritage listings within close proximity to the Project area.
- Register of the National Estate List one Indigenous place listing for Tabulam, with no further details provided.
- Commonwealth Heritage List (Australian Heritage Council): Contains no Aboriginal Heritage listings within close proximity to the Project area.
- The National Heritage List (Australian Heritage Council): Contains no Aboriginal Heritage listings within close proximity to the Project area.
- The State Heritage Register (NSW Heritage Office): Contains no Aboriginal Heritage listings within close proximity to the Project area.



5.3 National Native Title Tribunal Search

A search of the National Native Title tribunal was conducted on Tuesday 11 November 2013 with results received on one month later on Wednesday 11 December 2013. The search results determined that the Western Bundjalung (NSD2300/2011) were successfully registered as Native Title Applicants for the region including Tabulam. The search result has been included as appendix e. The search results were re-confirmed on Tuesday 5 August 2014.).

The status of the Claim is that the Western Bundjalung have passed the Test of Registration but have yet to have their Native Title rights determined. From a cultural heritage perspective, it is OEH policy that a registered Native Title Claim provides no additional status or rights of consultation during cultural heritage assessments or consultation in preparation for any Aboriginal Heritage Impact Permits. However, it is widely accepted that consultation with Native Title Claimants should be undertaken. The Western Bundjalung have been consulted throughout the preparation of this assessment.

With regard to Native Title rights, with the proposed bridge alignment deviating from the existing bridge easement, it is recommended that Roads and Maritime satisfy itself that proper consultation with the Western Bundjalung has occurred.

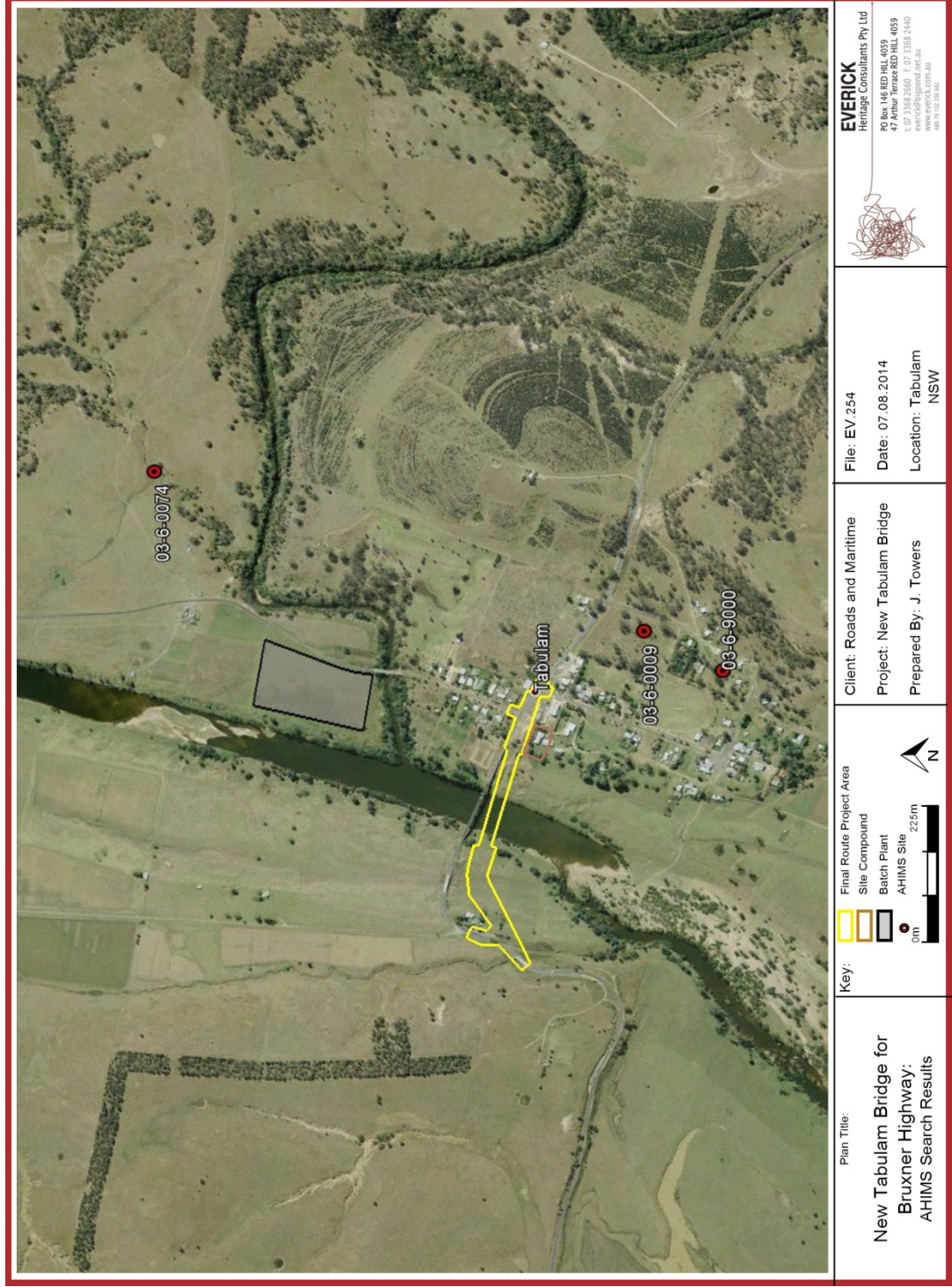


Figure 3 AHIMS Search Results: the location of registered AHIMS sites in relation to the New Tabulam Bridge alignment



5.4 Historical aerial photography

Historic aerial photographs from 1948, 1962, 1975 and 1997 were reviewed as part of this assessment to assist in the identification of original environmental and topographic features and the degree of site disturbance post European settlement. The historic aerial photographs examined for this report are provided in appendix c.

The first historic aerial available for this location is dated from 1948 (Figure 15), which shows the Tabulam locale as having undergone extensive vegetation clearing, mainly for the purposes of cropping and small scale farming. Even the ridge to the east of the township – which may prove to retain Rock shelter bearing landscape features and which may be associated with the burial described in McBride – has seen disturbance from farming activities visible in this photograph.

By 1962 (Figure 16) further cropping or farming activities have encroached into the project area, particularly in the south and north-western portions. More dwellings and buildings are visible within the boundaries of the township, and some vegetation patches from within the township area have been thinned or cleared. The banks of the Clarence River remain reasonably unchanged.

The 1975 Aerial photograph (Figure 17) shows cropping continuing in the western and southern areas as well as and just immediately north of the project area. Further building and infrastructure formation is evident. As for the 1962 photograph, the eastern ridgeline and the banks of the Clarence River appear the least changed over time.

By 1997 (Figure 19) it would appear the green movement has been at work in the area, with large trees returning in places, particularly along the river banks and the eastern ridgeline. Outside of the project area, portions of the landscape are returning to a vegetated state. Cropping seems to have lessened or changed in the western and southern portions of the Project area, and the township is increasing in size and density. The banks of the river itself remain fairly similar to earlier photographs, indicating it has still remained relatively undisturbed.

5.5 Parish maps

The analysis of parish mapping is relevant to assessing past European land uses which may have impacted on Aboriginal cultural heritage. This is of particular use in assessing land uses before the availability of historic aerial photography.



Historic parish maps of Tabulam from 1889, 1915 and 1932 were reviewed as part of this assessment to assist in the identification of original land use, tenements and the potential land disturbance associated with post European settlement. For the purposes of this report, the analysis of parish maps will focus on the location of the existing Tabulam Bridge and the proposed alignments. The parish maps reviewed here have been provided in appendix d of this report.

The 1889 parish map illustrates the township of Tabulam was well established by this time, although the bridge has not yet been developed, and the use of a ferry is employed to cross the Clarence River. Hill Street would be the future location of the road bridge. A majority of the land holdings belong to the Chauvel Family (C.G.T Chauvel, C.H.E Chauvel and M. Chauvel). The first block of land holdings belonging to the Chauvel's were bound by Charles Street in the north, and Grafton Street in the south, stretching from Bank Street to the west to Laurence Street in the east. The Chauvel's maintained further holdings south of South Street. Properties to the east and far south of the Township have been opened for lease. A racecourse is situated to the far south, and next to it is one of two town cemeteries. The other cemetery being located to the far north of the township, located near a bend in the Tabulam Rivulet.

By 1915, the Tabulam Bridge has been established. There has been no change in the first block of Chauvel land holdings, though it must be noted that G.I. Barnes and others have now gained title of what was formerly parts of Creek Street and Grafton Street. A new road (Clarence Street) has been planned to cut through the Chauvel properties from Hill Street, heading south through Grafton Street and adjacent properties to join up with Court Street. Banks Street has been for the most part decommissioned, likely due to changes in water levels of the Clarence River. Grazing activities have commenced east of the township. Of further note is a small section of lands in the south-east which was declared 'For Use of Aborigines' noted in 1931. The racecourse and cemetery are still located south of the main township, although the cemetery to the north was decommissioned by the time this Map was published.

The 1932 Parish Map illustrates the main state route (formerly Hill Street, now the Bruxner Highway) was in the development stage. Clarence Street is now well formed, and a further 'dog leg' road has been established cutting through properties on Lawrence Street, south-west to Court Street. The Chauvel's are still the primary land holder within the township of Tabulam. It is also noted the lands slated for Aboriginal use in 1931 was revoked in 1956. The racecourse and cemetery are still present to the south of the township although the Clarence has further encroached toward both developments.

Conclusions: The township of Tabulam had undergone some notable changes in its early settlement history. The swelling of the Clarence River and additional infrastructure have noticeably altered the shape of the centre of the township. That being said, the Chauvel's have been the primary land holder in the township since at least



1889. Changes in land tenure begin to occur in the early 1900's for larger plots of land to the south and east of the Township. Coincidentally, pastoral enterprises commenced in the early 1900's to the east of the township and continue to present. It is of note that changes in the size and shape of the Clarence River through naturally occurring fluvial processes may have resulted in the disturbance of Aboriginal cultural materials. However, the absence of physical manifestations of culture does not negate any intangible values associated with particular places.

5.6 Synthesis of regional archaeology and ethnography

5.6.1 *Territories, settlement and movement*

Tindale (1974) records the Tabulam region within the 'Badjalang' or Bundjalung linguistic group territory, extending from the northern bank of Clarence River through to the Richmond River at Ballina and inland to Tabulam, stretching south to Baryugil. The Bundjalung linguistic group has been recorded as comprising of a number of different sub-dialect groups (Tindale 1974; Crowley 1978; Sharpe 1985), where each group maintained individual group identities and maintained control of lands whose boundaries had been established in mythology (Creamer and Godwin 1984). A group of families might make up a clan or 'horde'. This was a land holding group occupying a distinct territory. A loose confederation of clan groups recognised a wider social and linguistic association.

In regards to the Bundjalung, the concentration of dialects to the north, compared to the fewer dialect groups of the adjoining southern Kumbainggiri, led Crowley to suggest the Bundjalung areas may have been colonised earlier than the Kumbainggiri, thus allowing a greater number of dialects to develop. Crowley also suggested coastal Bundjalung dialects varied significantly from inland Bundjalung dialects (Crowley 1978). Joshua Bray, a settler on the Tweed River, travelled from the coast to the inland Bundjalung dialect country of the Upper Richmond and found 'The language of the Aborigines is sometimes completely different thirty miles away' (Bray 1901:193).

There is some contention over the exact territorial boundaries of the Aboriginal language groups, particularly for the Badjalang, where language surveys have recorded a number of language morphologies which while similar to Badjalang are also distinctly different, indicating some level of shared linguistic origin (Sharpe 1994; Crowley 1978). It should be noted that linguistic groups cannot be accurately reconciled due to a number of factors identified by Sharpe (1985: 109-110). These factors include:

- Disparities between group names as a result of phonetics and pronunciation differences – where one group would call itself one name, and be referred to by another from a different group



- Inconsistencies in identity, where a group could distinguish itself from another based on geography but also on family associations
- The displacement of groups from their original territories and movement into new territories post-European settlement resulting in the shift of ancestral territories often to align with nearby settlements, which may or may not have been within their original territories.

As such, all linguistic based groupings of Aboriginal people are subject to some level of inconsistency.

Crowley (1978) records two Badjalong language subgroups for the Tabulam and Baryugil regions, being the Wahlubal and the Wehlubal. Crowley places the Wahlubal dialect group extending from the Richmond Range to the Great Dividing Range north to the Gidabal/Galibal people of Bonalbo and Woodenbong and south to the Birihn (Crowley), Banbai (Tindale), and Bundel/Bundela (Oakes) of Baryugil. Oakes in Wilkinson states one of the favoured living places was at what is now known as Tabulam (Wilkinson 1989:5). Sharpe (1994) also maps Tabulam within the Wahlubal territory, which is bounded by the Wujehbal boundaries to the west, the Wehlubal to the south, the Dinggalbal and Galibal to the north. In more recent works, the Aboriginal peoples of the Tabulam area are simply referred to as 'the Bungjalung people of Jubullum' (Riebe 2002).

The few sources available suggest clan groups would remain within a defined territory, scattered in smaller family groups, which may combine at times of seasonal abundance, or for specific purposes such as ceremonial occasions or for the resolution of disputes. One such instance for the Tabulam region was recorded in 1885 (Trove 2014). An article was printed in the Clarence and Richmond Examiner and New England Advertiser detailing a conflict between the Tabulam Aboriginal groups and the Bonalbo and Richmond groups. The conflict was the result of the kidnap of a female of the Bonalbo tribe by a man from the Tabulam tribe. After an hour of skirmish warfare and a number of one-on-one bought, peace was declared, with all groups meeting for a corroboree. (Trove 2014). Contact between coastal groups may have been more frequent than for inland groups. Bray wrote 'The Coodjinburra tribe inhabiting the coast used to mix very much with the Ballina Richmond River blacks' (Bray 1901:9). However, one writer suggests contact between inland groups may have been as frequent. 'Often the Lismore tribe would send messages over to the Clarence or the Tweed tribes ... should the invitation be accepted the whole tribe from the Tweed or Clarence would journey to the Richmond ... for perhaps a month' (Flick 1934:2). Populations are difficult to estimate with any confidence. It is clear that large groups did assemble for specific occasions, perhaps frequently.

A number of models have been proposed to account for the systematic use of the hunter gatherer environment of northern NSW and southern QLD. A review of sightings of Aboriginal coastal groups led Coleman (1982) to suggest movement took place in a north-south manner for social purposes (ceremonial, tribal fights etc.) rather



than to procure foods or raw materials. McBryde (1974 and 1976) argues for a seasonal movement of people between the coast in summer exploiting marine foods, and hunting inland in winter. On the ethno-historical evidence McBryde suggested some seasonal movement was usual and the basic subsistence economy of hunting, fishing and gathering was neither static, nor completely migratory, but characterised by movement between the coast and the foothills (McBryde 1974:337). A number of early references note seasonal movement on a limited scale. Bray (1923) states the Lismore “tribe” used to go to Ballina at the mouth of the river. Sullivan (1964:20) recorded that inland groups were allowed to come to the Tweed coast for a time. The archaeological evidence for movement in the coastal river valleys is less conclusive (McBryde 1974:338).

Movement within a clan territory in response to local conditions or availability of different food sources also occurred. Aborigines at Byron Bay often shifted camps, but seldom moved far from a flying fox camp (Anon.n.d.:1). Bundock noted on the upper Richmond flying fox were taken more easily in wet weather (1898:4-5). Moehead recorded near Lismore the Richmond Aborigines, ‘...camped on the river flats until the rain set in and would then retire to the hills’ (Anon n.d.:1). At Ballina, Ainsworth describes movement over the short distance between the beaches and the ‘big scrub’, a distance of only a few kilometres. He suggests Aborigines of east and west Ballina were scattered in small groups combining at times of abundant food resources: ‘...the tribe usually camped in divisions at different places except during the oyster season when they assembled unitedly at Chickiba, on North Creek...’ (Ainsworth 1922:30). ‘The blacks, in the month of September each year, flocked to the beaches for salmon fishing’ (Ainsworth 1922:30). To which or both of these events the Aborigines of the Casino area attended, we cannot say with any certainty.

An exception to normal movement practices across tribal boundaries was documented by Petrie (1904) and Bundock (1898). Bundock recorded the movement of the Richmond River Aborigines to the Bunya Mountains, ‘... every third year or so ... under a sort of “Truce of God” ...for the blacks went through each others territories unharmed’ (Bundock 1898). In this case Bundock was referring to the Aborigines of the Wyangarie area on the upper Richmond, approximately 37 kilometres north of Casino.

Wilkinson (1989) has written extensively of the history of Tabulam with many references to Aboriginal station workers on Tabulam Station and the surrounding district. She quotes an early settler. “...The Aboriginal stockmen and their families lived on the banks of the Clarence River in “humpies” of their own contrivance—bags, bark, and corrugated iron over a framework of saplings. Their graveyard was “up creek” from the old Tabulam Cemetery on the bank of Deep Creek. Graves were shallow; the body lay between two sheets of bark...” (Wilkinson 1989).



5.6.2 *Economy*

The most detailed analysis of material culture has been undertaken by McBryde (1978). The region of the Tweed, Richmond and Clarence Rivers would seem to form a distinct unit. This is particularly so in the case of fishing technology. The multi-pronged fishing spear and the shellfish hook are both absent from this region, and fish were caught in nets or speared in the shallows (McBryde 1978:187). Spears were single pointed fire hardened weapons (Dawson 1935:22), of both a lighter and heavier variety (Byrne 1946:3). The woomera or the spear throwing stick were not used in this region (Dawson *ibid*). The range of materials is considered wider than central Australian tribes, with fewer all-purpose items, few composite tools and a number of specialised ones. This may reflect a more sedentary life style in a rich environment requiring fewer specialised tools (McBryde 1978:187).

The stone tool element in the material culture was small and unspecialised. The archaeological evidence suggests changes to a simpler stone technology took place only centuries before European settlement. The stone tools in use immediately before European settlement, '... show little typological sophistication and did not demand highly skilled craftsmanship' (McBryde 1978:198). The most balanced and comprehensive descriptions of material culture in the Lismore and Casino districts are those by Bundock. Only Bundock approached the idea of maintaining detailed records of economic activities and the manufacture of string, woven bags and leaf / wood containers (McBryde 1978:187).

The resources of sub-tropical rainforests were used extensively in the technology of the Richmond, which is heavily dependent on wood and bark fibre (McBryde 1978:197). Rainforest timbers were used to manufacture spears, a variety of clubs, shields, boomerangs and digging sticks. Bark was used for containers and shelter.

Stone axes are referred to by Dawson (1935:22), and Byrne (1946:2). Fishing nets and rope were made from twine spun from the flame tree (Byrne 1946). Fishing nets were made a couple of yards long with a stick at each end. They were used individually or in combination with many of the same type. Bundock (1898) and Ainsworth (1922) describe the same type of nets used for game drives in rainforests and for cod fishing in summer. Descriptions of diet for inland groups emphasise terrestrial animal foods, with little emphasis on vegetable foods.

5.6.3 *Archaeological context – prehistory*

Evidence for occupation of coastal N.S.W. and QLD is dated into the Pleistocene at Wallen Wallen Creek on North Stradbroke Island, where an occupation phase between 20560 ± 250 years and the early Holocene period is evident. Analysis of faunal materials from the site suggests an economy initially based on the hunting of



terrestrial fauna changed to one based upon a reliance on marine fish and shellfish, which may reflect changing local ecologies caused by gradual rises in sea levels during the late Pleistocene (Neal and Stock 1986).

Archaeological evidence for the Richmond River suggests conditions suitable to the exploitation of estuarine food resources occurred relatively recently (Bailey 1975; Rich 1994). A shell midden on Chickiba Creek was found to have accumulated between 1750 BP and c 1850 AD (Bailey 1975:52). Shell samples from the Angels Beach area are dated between c 530 BP and 810 BP, with one sample at c 900-1000 BP (Rich 1994:195). Stone material was assessed on technological grounds, to date within the past 2000 years (Rich 1994:161). Bailey's basal date of 1750 BP suggests the resource rich environment may not have been available at an earlier time, for any more than small groups (Rich 1994). By contrast, the Tweed River estuarine site was in use c. 3000 years earlier (Appleton 1993).

The earliest occupation site for a riverine location comparable to the Casino area is the Seelands rock shelter on the Clarence River, which contained an occupation phase from circa 4500 BC - 1600 AD (McBryde 1974:Table 1). The analysis of plant remains suggested a vegetation mosaic of open dry sclerophyll on elevated ground with corridors of rainforest along water courses (McBryde 1974:327). Analysis of faunal remains for the upper levels of the site indicated wallabies, possums and bandicoots provided the greater part of the meat diet (Wakefield in McBryde 1974:360). Other animal remains included echidna, native cat, kangaroo, fruit bat, mussels, tortoise and catfish. McBryde noted a number of clear distinctions between the riverine Seelands site and the coastal midden at Wombah on the Clarence estuary.

The Seelands artefact assemblage is more diverse and greater in quantity than Wombah, with strong evidence for the manufacture and maintenance of stone tools. The biological material at Seelands reflects a broad-based economy, exploitive of a number of micro environments, in contrast to the narrow base at Wombah, shellfish. The archaeological evidence suggested contact between the riverine site and the estuary at both sites, and evidence for winter occupation in the presence of emu eggshell at Seelands, while a dependence on oysters at Wombah would suggest occupation in late spring or summer (McBryde 1974:8-9).

5.7 Previous Aboriginal heritage assessments

The earliest archaeological survey at Tabulam was conducted by Isabel McBryde as part of a regional archaeological survey including the New England Tablelands and the Upper Clarence and Richmond Rivers. The burial site, Tabulam 1 in the Tabulam Village, was recorded in 1967 during the research for the 1974 McBryde publication 'Aboriginal Prehistory in New England'.



The Sites of Significance survey team recorded a large number of ceremonial, spiritual and natural mythological sites between 1974 and the 1980s. A member of that team described the concentration of sites in the Bundjalung tribal area as, '... one of the densest concentrations of sites of significance to Aboriginal people in New South Wales' (Creamer: correspondence NPWS 1979).

These include natural mythological sites, bora ceremonial areas, increase sites (djurbils) and various other types of sites, of which details remain confidential. The majority of these sites are located in the northern regions of the Gidabal / Galibal territory.

One Site of Significance, the Njimbun Cave Tabulam, was disclosed to the team. The location and cultural details are confidential. However, it is known that the cave is not in close proximity to the Project area.

There are no additional previous archaeological assessments in the immediate Tabulam locality known to the authors at this time. The probable lack of systematic assessments is reflected in the AHIMS data base which has only two listings of sites one from 1967 and another of unknown date, in an area that has a 'strong' Aboriginal community presence both in antiquity and the historical past and present.

Local Elders of the Tabulam community have been working consistently for some time to have their culturally important places recognised and recorded. Inge Riebe, (2002) undertook an assessment on behalf of the NSW National Parks and Wildlife Services in support of a Declaration of an Aboriginal Area for the Jubullam Flat Camp Area. The report created as a result was the culmination of extensive work, including anthropological interviews and ongoing community consultation. Everick has had discussions with Inge Riebe in the preparation of this assessment, and confirmed that Roads and Maritime has been consulting knowledge holders whom can impart the cultural significance of the region. It is of note that the Jubullam Flat Camp Aboriginal Area is confined to an area approximately north east of the Project Area. The Jubullam Flat Camp is not a registered Aboriginal Place, although the camp and cemetery are registered on the AHIMS site database.

Publically available is the 2010 'Jubullam Flat Camp Aboriginal Area Plan of Management', available from the Department of Environment and Climate Change ('DECC' – now the 'OEH') a document which gives a background history to, and a grounding in the ethnographic setting of, the Flat Camp Aboriginal Area and the Tabulam region more generally. This document describes places mentioned by the Elders of the community, however specific details are missing or indistinct.

The Jubullam Flat Camp Area mentioned local places of heritage significance, such as the cemetery mentioned by Wilkinson (1989), (Section 5). Also referenced as places of heritage significance are other camp locations



(‘Top Camp’, ‘Black Camp’, and ‘Camp’), a morgue location, a birthplace, an ochre site, the location of ‘Turtle Point Mission’ and other culturally significant features and locations (Figure 14).

“Whilst the purchase and gazettal of the Flat Camp did not include adjoining lands that are important and associated with the Flat Camp, the cultural significance of these areas to the Bundjalung people of Jubullum has been well documented (Riebe 2002). Figure 14 shows the Flat Camp and surrounding cultural landscape.” (Jubullum Flat Camp Aboriginal Area Plan of Management 2010: 3).

The sites mentioned in the Jubullum Flat POM are not quantified, the boundaries of their physical locations or their cultural influence are not made clear in the report. Instead, comments about their association to each other and to the overall importance and sensitivity of the Cultural Landscape are presented.

Associated with the cemetery is the site of a morgue area on adjoining land approximately 700m to the south of the Flat Camp. The morgue consisted of a one room bark shelter (Jubullum Flat Camp Aboriginal Area Plan of Management 2010: 9).

It is important that these three associated areas; the ‘flat camp’ site, morgue area and cemetery, are considered together when looking at the cultural values associated with the area. Together, they make up part of a cultural landscape where the Bundjalung people of Jubullum lived and carried out mortuary rights, the funeral procession, burial and mourning of their deceased up until 1948 (Jubullum Flat Camp Aboriginal Area Plan of Management 2010: 10).

While each of the aforementioned features appear to be considered significant Aboriginal places in and of themselves, it is essential to view these features within the context of their cultural landscape. The association of landscape features in relation to each other presents more dynamic cultural landscape than would have been presented in the analysis of discrete features. In this respect, potential impact of the Project on the significance can only be ascertained through community consultation.

Gabrielle Russell - Mundine, in fulfilment of her PhD requirements, submitted the thesis entitled ‘From pumpkins to property management plans: developing the organisational capacity of the Jubal Aboriginal Corporation’, in 2010 to Southern Cross University.

This thesis uses the touchstone approach to the topic of the Jubal Aboriginal Corporation and their management of their cultural heritage. The touchstone approach is an academic method which has gained traction and popularity in recent academic circles, but is poorly articulated and understood elsewhere. It uses broad brushstrokes to describe the cultural landscape, rather than the finer detailed site specific approach



usually employed by archaeologists. Whilst giving the reader an excellent grounding in the ethnographic landscape as well as details about personal and cultural essentials, it is poor in giving site specific information useful to the project in assessing a viable route for the Proposed Works. It is therefore necessary to consult with the Aboriginal community, as it is their culturally specific knowledge which enables the landscape to have dynamic meaning, and which will answer the questions asked regarding finding a viable route for the Project through this cultural landscape.

5.8 Aboriginal sites: range and nature (pre-European settlement)

Whilst archaeological research in the Tabulam region is limited, the Consultant has conducted a number of cultural heritage assessments in the adjacent Richmond River catchment approximately 50 km to the west. There would be no doubt predictive modelling for economic / resource sites in similar riverine locations such as Casino would be no less relevant to Tabulam. Therefore it is a reasonable assumption that the following archaeological site types have potential to occur within the Tabulam area:

Single (isolated) artefacts:

Isolated Artefacts will consist of single stone artefacts, which may have been randomly discarded or lost. They may occur in almost any environmental context exploited by Aboriginal people. They are commonly stone axes, single cores, hammer stones, bevelled pounders, pebbles and flakes. Their presence may indicate more extensive scatters of stone artefacts exist or existed nearby, perhaps obscured by vegetation or dispersed by mechanical means.

It is likely that isolated artefacts may be located within the project area, although given the extensive land use history they are likely in a very disturbed context.

Open campsites / artefact scatters:

Open Campsites consist of scatters of stone artefacts and possibly bone and hearths. Their exposure to the elements means evidence of food resources used on the site (with the exception of shellfish) is usually lacking. An open campsite containing a large component of shell refuse may be described as a midden. They invariably consist of low or high density scatters of primary and secondary flakes in addition to the types of artefacts found as isolated finds. Open campsites may also contain burials when located on sand strata. Few open campsites are found on kraznozem and podzolic soils, possibly due to the destructive impacts of land clearing and the heavy vegetation cover. Detection is usually unlikely unless high degrees of surface visibility are present.



Campsites could be found on the broader river terraces of the project area. Given the extensive ground surface disturbance over the project area there is a low probability 'in situ' archaeological sites remain.

Rock shelters:

Rock shelters are generally closed, protected sites located within rocky outcrop landscape features. These sites contain occupation deposits, possibly art and grinding grooves are likely in locations where bedrock extrudes from hill slopes.

The Tabulam area contains many sandstone sheet overhangs suitable as locations of campsites. However, no such outcrops are located within the project area.

Quarry sites:

A stone quarry can be described as a region where a source of opaline silica exists, or other siliceous types of stone occur (e.g. chert, chalcedony and silcrete).

Quarry sites are only likely to occur at the slopes well east and west of the project area, and are not likely to occur within the project area.

Scarred trees

Scarred Trees are those trees which have been subject to the removal of bark for cultural purposes. The majority of scarred trees on the North Coast of NSW result from the removal of bark for use as covering, shields, containers or canoes. No doubt, as an outcome of widespread intensive land clearing and natural causes very few have survived.

There appear to be no old growth trees that may carry Aboriginal scars in the Project area. Reference to aerial photography and historical photographs suggest most tree growth in the Project area is recent regrowth.

Burial sites

The majority of burials recorded to date in the northern NSW coastal zone occur in coastal dunes and or sandy soil substrates. The Tabulam 1 burial site is almost certainly located on the slope in the vicinity of Lawrence Street, southeast of the project area.



The Old Tabulam Cemetery and the Jubullum Flat / Deep Creek burial ground are located well outside of the project area. A traditional Deep Creek burial site with historic use was reported by Wilkinson "...Their graveyard was "up creek" from the old Tabulam Cemetery on the bank of Deep Creek. Graves were shallow; the body lay between two sheets of bark..." (Wilkinson 1989) Historic sources and recent cultural heritage assessments undertaken in support for the application to for this to become a registered Aboriginal Place have confirmed the presence of burials at this location through Ground Penetrating Radar, with the interpretation being some of them are of Aboriginal origin. Excavation and scientific testing would be needed in order to conclusively prove this.

The creek on which the cemeteries are located has three names: Deep Creek by the Wilkinson source, Bottle Creek by Cockbain and Tabulam Rivulet, according to the 1:25000 Topographic Map. The creek in question is at the northern edge of Tabulam residential area, crossed by Pioneer Bridge. This area falls outside the project area and will not be impact by any of the four project alignments.

Natural mythological sites and ceremonial areas:

These sites are natural features, which derive their significance from an association with stories of the creation and mythological heroes. These types of sites cannot be predicted and their choice of location is a matter of cultural choice known only to the Aboriginal individual or group of select individuals at that time. The landscape would have contained many such sites before European contact. This is reflected in the large numbers of this type of site that still remain. These sites are natural features, which derive their significance from an association with stories of the creation, and mythological heroes.

A particular concentration of these sites exists in the headwaters of the Clarence, Richmond and Tweed Rivers. In the upper Clarence, Richmond and Tweed Valleys, these include rock pinnacles, mountains, waterfalls and waterholes. A variant of the mythological site is the increase site or 'djurebil' (jurraveel in Byrne 1984:11) where rites were conducted, which assured the continued productivity of plants and animals. No doubt the knowledge of many other such sites has gone with the passing of the 'knowledge holders'.

Knowledge of ceremonial and natural mythological sites no doubt exists with the Tabulam Aboriginal community and broader Aboriginal communities. Consultation on mythical and ceremonial sites is included in Sections 8.3 and 10 of this report.



6. Predictions

Models to describe possible patterns of settlement and movement in the North Coast region vary considerably. One suggests clan groups ranged between the seacoast and foothills of the coastal ranges on a seasonal basis (McBryde 1974). Early sources support this view to some extent as there are records describing the movement of inland groups of the Clarence River to the coast during winter (McFarlane 1934; Dawson 1935:25).

A second model suggests movement of coastal people was not frequent and semi-sedentary groups moved north and south within the coastal plain rather than to the upper rivers (Coleman 1982). The model is based upon reports of numbers of small villages composed of dome-shaped weatherproof huts between the mid NSW coast and Moreton Bay. Flinders described a small group of huts in the vicinity of Yamba in 1799, and Perry described two villages on the banks of the lower Clarence in 1839.

Similar sightings were reported by Rous on the Richmond (McBryde 1974:9), Oxley on the Tweed (Piper 1976) and in Moreton Bay (Hall 1982). The construction methods described for these huts seem to suggest occupation for a period of months at a base camp rather than a constant wide-ranging pattern of low-level land use. Godwin (1999:211-217) argues neither of the above 'models' is supported by the archaeological record, and local conditions dictated exploitation strategies on the North Coast of NSW.

6.1 A predictive model: aboriginal cultural heritage (pre-survey)

Research indicates the current Aboriginal community have a long, vibrant and strong connection to the Tabulam region. An area of particular significance, the Jubullum Flat Camp Area, is associated to a number of other sites or locations in the greater Tabulam area and therefore should not be viewed or assessed in isolation.

Archaeological sites have a potential to occur almost anywhere where original surfaces exist. These sites are most likely to be isolated artefacts and artefact scatters with a low probability of tree scars and quarry sites. The most likely pre-historic Aboriginal occupation areas are the floodplain on which the village is located, the river terraces and banks east and west of the Clarence River. Major flooding events may have impacted on the integrity of excavatable deposits on the banks of the River, however artefacts could remain present and would likely be of low archaeological value. Grinding grooves have a potential to occur on sandstone rock sheets on the river margins.



Detection of archaeological sites by field inspection alone is unlikely to prove definitively that there are not archaeological materials or sites in the project area due to the generally heavy ground covers / limited ground surface visibility within the project area.

Of burials, the high levels of ground disturbance over the project area indicate that burial area unlikely to remain, should they have been located within the project area before European settlement.

It must be acknowledged that there is a moderate to high probability that a 'background' scatter of archaeological materials exists throughout the project area. These will be mainly stone artefacts. Devising a wide ranging systematic program to detect random scattered materials is likely to be unproductive and results would be dependent upon fortuitous circumstances.

7. Field methods and sampling

7.1 Survey participation

The project area is within the area administered for cultural heritage purposes by the Jubullum LALC.

Survey 1: Thursday 5 December 2013, Alex Torrens, Sites Officer for the Jubullum LALC, has assisted Everick Director Tim Robins in the archaeological survey. Also in attendance was Scott Smith (Project Manager – Roads and Maritime), Warren Martin (Project Manager - Roads and Maritime) and Andrew Whitton (Aboriginal Heritage Advisor - Roads and Maritime).

Survey 2: Monday 3 February 2014, Uncle Harry Walker (Elder / Knowledge Holder), Uncle Lindsay Walker (Elder / Knowledge Holder), Leonard Gordon (West Bundjalung Native Title Applicant) and Darren Freeburn (West Bundjalung Native Title Applicant) attended an archaeological survey of the project area. Also in attendance were Tim Robins, Scott Smith and Graham Purcell (Aboriginal Heritage Advisor – Roads and Maritime).

7.2 Survey Methods

The field inspections were conducted on foot. Due to the very limited area of natural surface visibility, a systematic grid pattern search was impractical. Rather, a targeted strategy of wide transects, coupled with identifying areas with some ground surface visibility within each transect was adopted.



Photographs were taken as a record of general features and conditions, to indicate the degree of surface visibility and the content of any sites found. Notes were made of the degree of surface visibility, the area of visibility, ground cover, land uses and any other relevant features.

The area subject to survey included the original four route alignment options, being two options north of the existing bridge and two south of the existing bridge. Given the Project works will include the demolition of the existing bridge, the survey area subject to this report also covers lands immediately north of the existing bridge.

7.3 Constraints to Site Detection

The project area comprises two landform types, being river terraces, often separated by river overflow channels caused by flood events. For ease of site description, the Project area has been divided into geographical sections, which also allows identification of which alignment options fall within each survey area.

7.4 Survey coverage

Near 100% survey coverage was achieved in areas which were reasonably likely to contain visible surface deposits of cultural heritage.

The areas surveyed are shown in Table 2 below. A photographic record is shown in Figure 4 – Figure 11.



Table 1: Archaeological Survey Area Description

Survey Area	Environmental Description	Landscape Description	Disturbance Description
north-east	Cleared pastures. Small pockets of native vegetation regrowth.	River terraces, Narrow river overflow channels.	Extensively Cleared. Cuttings for Bridge access. Residential Landscaping
south-east	Cleared pastures, access tracks	River terraces, Narrow river overflow channels.	Extensively Cleared. Track cuttings for Bridge and river access. Carpark. Cattle Loading Ramp.
north-west	Cleared pastures.	River Terraces, Wide river overflow channels.	Extensively Cleared. Track cuttings for Bridge and river access.
south-west	Cleared pastures. Access tracks.	River Terraces, Wide river overflow channels.	Extensively Cleared. Extensive cultivation. Track cuttings for Bridge and river access. Excavation of topsoil in parts.

Table 2: Archaeological Survey Coverage Analysis

	north-east	south-east	north-west	south-west
Landform	River Valley	River Valley	River Valley	River Valley
Landform Element	River Terraces / Overflow Channels	River Terraces / Overflow Channels	River Terraces / Overflow Channels	River Terraces / Overflow Channels
Area (sqm)	3,300	9,765	7200	18150
Exposure %	3%	5%	5%	10%
Exposure Type	Track Cuttings, Tracks	Track Cuttings, Tracks	Track Cuttings, Tracks	Track Cuttings, Tracks, Cattle pads
Area of Exposure (sqm)	99	488	360	1815
Visibility %	80%	80%	80%	90%
Area for Site Detection (sqm)	79	390	288	1633
% of LF for Site Detection	2.4%	4%	4%	9%



Figure 4 View west: showing north-east section of project area with access tracks and Eucalypt regrowth.



Figure 5 View east: showing residential landscaping over north-east section.



Figure 6: View north-west: showing south east section and large cutting for a access track.



Figure 7: View east: showing south east section, with carpark and cattle loading ramp.



Figure 8 View north: showing north-west section of the project area, showing cleared pastures (formally under cultivation) and broad overflow channel.



Figure 9 View east: showing north-west section and river terraces.



Figure 10 View north: showing south-west section, with large excavation cutting where topsoil has been removed.



Figure 11 View south west: showing south west section with cleared pastures covering river terraces and overflow channels.



8. Results of assessment

8.1 Archaeological potential of the project area

The predictive model for the project area identified the river terraces as landforms with the potential to contain surface and/or subsurface Aboriginal Objects, before European settlement. As is typical for archaeological surveys in this region, ground surface visibility was extremely low. This means the primary goal of the survey was to identify historic land use activities that might cause the predictive model to be altered.

The archaeological survey found all of the project area has seen substantial ground disturbance. All of the project area had been cleared of original vegetation, although it is of note that this almost certainly occurred by hand given it was cleared in the 19th Century (Figure 22). The river terraces showed very little evidence of scouring from flood events. The thick grass cover likely provided sufficient protection from moderate velocity flood events, with the flat terraces most likely being depositional soils. Additional disturbance has been caused by grazing of livestock, although again, this may have been minimal due to the thick grass cover that characterises pastures in the region.

Whilst the eastern sections appear not to have been cultivated, the historic record shows extensive evidence of cultivation on all river terraces on the western sections (Figure 15 & Figure 17). The level of cultivation was such that it would have almost certainly have removed any archaeological value from these lands. Additional evidence of disturbance can be found in the excavation of access tracks for the bridge and the removal of topsoil (Figure 10).

The eastern sections have seen additional disturbance through large areas of cut and fill, providing access to the bridge and the river bank (Figure 6). The river overflow channels have been partially drained. Other disturbance comes from construction of a carpark and stock loading ramp (Figure 7). Only two small portions of river terrace show evidence of minimal ground disturbance, being disturbance limited to hand clearing of vegetation and grazing. The final route option impacts on one of these areas, with the maximum impact being over just 100 – 200 m². When viewed in the context of the surrounding lands, neither terrace is considered of high potential to contain significance deposits of Aboriginal Objects.

The approach to the Clarence River from these terraces is steep and largely inaccessible, except by the track which has been cut into the river bank. Whilst the Tabulam region has considerable ethnographic evidence of occupation by Aboriginal persons, more appropriate occupation areas are located immediately to the south and north of the project area, both being Traditional camp sites (Torrens pers. comm. 05.12.13). Neither terrace is



considered to constitute a potential archaeological deposit, such that they would warrant further investigation (see also Section 8.2.5).

8.2 Stage 2 PACHI / due diligence assessment

It is important at this stage to assess the project against the OEH's due diligence code to assess the level of impact the project activities may have on Aboriginal cultural heritage. This will also assist in identifying whether it is reasonable that stage 3 of the PACHI process is commenced.

Step 1: will the activity disturb the ground surface?

Yes. Refer to section 1 for a full description of the project activities.

Step 2a: search of the AHIMS database

A search was conducted on Wednesday 7 August, 2013 of the OEH Aboriginal Heritage Information Management System (AHIMS service number 107790) over a 1km zone surrounding the project area. None of the listed Aboriginal cultural heritage sites are located within the project area (Figure 3).

Step 2b: landscape features with cultural heritage potential

Having regard to:

- The nature of Aboriginal occupation in the region
- The project area's proximity to resources
- The project area's original vegetation, soils and topography.

Aboriginal occupation appears to have centred on the major rivers, tributaries, back swamps and wetlands. However the archaeological evidence for sites that would reflect a preference for riverine locations is sparse due to the lack of archaeological surveys and generally poor surface visibility.

Applying the reasoning of the due diligence code, as the project area is within close proximity to a major watercourse, and has the potential to contain Aboriginal cultural heritage.



Step 2b: is there evidence of past ground disturbance?

The disturbance analysis undertaken in Section 8.1 above demonstrates a generally extensive history of ground disturbance. A strict interpretation of the definitions of ground disturbance with the Due Diligence Code would lead to the conclusion that all of the project area has seen ground disturbance, and no further assessment is warranted.

Additional steps – PACHI stage 3

The archaeological and ethnographic evidence does not support moving to stage 3 of the PACHI process for the final route option. If Aboriginal Objects are located within the project area, they are most likely in a highly disturbed context and limited to what is commonly referred to a ‘background scatter’. Such objects typically add little to our understanding of Aboriginal occupation of the area.

8.3 Intangible (non-physical) cultural heritage

The literature review identified three potential places of intangible heritage significance immediately north of the project area. These are the ‘Blacks Camp,’ ‘Big House’ and ‘Birthplace’ (Figure 14).

Consultation with Uncle Harry Walker identified the place known as ‘Blacks Camp’ as an occasional campground used predominately by men as they moved about the region. The camp was used in historic times as well as before that. Any camp remnants have likely been destroyed by land clearing, grazing and bridge construction works. The West Bundjalung and Uncle Harry Walker were not concerned about any potential impacts to Blacks Camp by the project.

The ‘Big House’ was a house built for the Mundine family by the Barnes family, early settlers to the region. It was situated immediately north of the two northern route options. The house was a simple slab construction and comprised of two rooms with a tin roof. Other shelters (humpys) were erected around the house from time to time.

The house was an important social focal point to the local Indigenous population. People would gather there before holding cultural ceremonies and dances. Being given to the Mundine family, the family viewed it as a demonstration of the successful integration of settler and Indigenous culture, and a place of ‘reconciliation’ (Harry Walker pers. comm. 03.02.14).



The house was subsequently taken from the Mundine family and demolished in the 1950's, with its occupants moved down to the mission at Turtle Point. This caused great distress to the family.

The Big House derived part of its significance from the fact that several generations of the local Aboriginal community were born there, including Uncle Harry Walker and his father Uncle Eric Walker. The birthing sites were said to be east of the big house and in the big house (Riebe 2002). However, during the site inspection, the gardens to the south and west of the existing residence, within the two northern route option alignments, were also said to be part of the birthplace. Numbers of persons born in this area is unknown.

The Big House / Birthplace has been identified by the knowledge holders consulted in this assessment as a highly significant area to them. It is part of the contemporary landscape, and the Western Bundjalung have stated the two northern alignment options initially considered were therefore 'unacceptable' to them. It should be noted that Aboriginal persons are the primary determinates of cultural significance, and the significance of this place has been well documented before any bridge proposals (Riebe 2002).

Uncle Harry Walker also identified a ceremonial ground approximately 50m south of the project area, on the eastern side of the Clarence River. This was the same ceremonial ground that would see people congregate at the Big House before and after ceremony. Uncle Harry Walker was of the opinion that the Project alignment would not adversely impact on this place.

9. Archaeological impact and significance statements

While the archaeological records for the region are poor, the ethnographic record demonstrates the region was extensively occupied, and a cautious approach to assessing potential impacts to Aboriginal archaeology is warranted.

The level of past ground disturbance over the project area has been so high that very little original ground surface remains. Of the two small areas that have been identified to retain the potential to be original, relatively undisturbed ground surface, neither was found to be particularly likely to contain subsurface Aboriginal Objects, given their archaeological context in the surrounding landscape. The potential for the final route option to impact on archaeologically significant Aboriginal Objects must therefore be considered low.



10. Cultural impact and significance statements

10.1 Theoretical framework

A cultural landscape approach recognises the continuity between past and present by acknowledging the connection between the remembered past and contemporary communities (Brown 2007:38). An integral part of contextualising a cultural landscape is to facilitate the incorporation of the knowledge of Traditional Owners. This can enable a comprehensive understanding of the socio-cultural context and a true recognition of significance and meaning (Harrison 2005:258; Ross *et al.* 2003:80). For some Aboriginal people sites have a particular significance which has little or no relationship to the archaeological significance (Greer 1999:117).

To assess Aboriginal cultural heritage sites appropriately, they must be seen in the context of the people to whom the sites are significant (Godwin and Weiner 2006:127; Greer 1999:116). For Aboriginal people, places are situated within a complex web of memories, beliefs, stories, practices, family members, local environments and cultural places together constitute a cultural landscape that represents both ancient, traditional life and dynamic living traditions (Bradley *et al.* 2002:9; Ross 1996:4; Smith and Burke 2005:389). This view embraces Aboriginal people's conception of space and time, where "places always exist in relation to other...places" and "the past impacts actively on the present" (Smith and Burke 2005:382). The lived experience of past and present traditions illuminates connections that are both tangible and intangible, and are visible in the dynamic, on-going cultural interaction that Aboriginal groups have with their country (Godwin and Weiner 2006:127; Sullivan 1993:60).

It is important to remember places do not have inherent cultural significance. It is through memories, stories, visiting, teaching and other activities with places that the significance is ascribed by the people who interact with them (Brown 2007:137; Smith 1996:67). Collaborative research, community consultation and the collection of oral histories can be used to inform an understanding of the nature of intangible experiences and values that are associated with the tangible aspects of sites and landscapes. This understanding underpins the identification and assessment of the cultural significance of a site or landscape.

10.1.1 Defining and verifying intangible cultural heritage

The aim of cultural heritage management is to establish the values particular groups of persons may associate with places or objects (Byrne 2003). Importantly, the value of intangible connections to landscapes by Aboriginal people has been well documented by Australian anthropologists since the late 19th Century (Weiner 2011:189). The value of the intangible often far outweighs values placed on the physical (Turnpenny 2007).



It is relevant at this juncture to review the accepted definitions of intangible heritage. Intangible heritage is defined in the UNESCO International Convention for the safeguarding of the Intangible Heritage (2003) as being (Article 1):

practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity. The “intangible cultural heritage”... is manifested inter alia in the following domains:

- (a) oral traditions and expressions, including language as a vehicle of the intangible cultural heritage;*
- (b) performing Arts;*
- (c) social practices, rituals and festive events;*
- (d) knowledge and practices concerning nature and the universe; and*
- (e) traditional craftsmanship.*

Whilst Australia does not rank amongst the 137 States which have ratified the UNESCO treaty, it does make for a relevant starting point. The UNESCO definition is particularly broad. In the context of the present assessment, it is clear that a burial place, ceremonial place and stone arrangement (even if destroyed) would fit within this definition. Ceremony is a well-documented traditional practice of Aboriginal people, and these cultural traditions can be a vibrant mix of oral traditions, performing arts, rituals, festivals and expressions of spiritual knowledge.

It is of note that there is no minimum timeframe for which an intangible heritage place must have been considered significant before it technically becomes so. Rather, what is critical would appear to be where the intangible heritage is shared amongst a cultural group and is ‘transmitted from generation to generation’.

10.1.3 New South Wales legislation and intangible heritage

Researchers have for some time criticised the disconnect between theoretical heritage ‘best practise’ and the legislation of Australia (English 2003; Godwin and Weiner 2006: 127; Turnpenny 2007; Andrews and Buggiey 2008). This is particularly so for the assessment and management of intangible heritage. When legislation along the eastern seaboard of Australia is compared, a common thread is that their main focus is undeniably on physical Aboriginal heritage (MacLaren 2006; Ross *et. al* 2010; Schnierer 2011). This may be about to change in NSW with the introduction of new heritage legislation around 2015. However, the current legislation retains a distinct bias towards the physical.



As reviewed in Section 2 above, the primary legislation in New South Wales for the protection of Aboriginal cultural heritage is the NPW Act. The Act protects both Aboriginal Objects and Aboriginal Places. Aboriginal Places must be declared places, and registered on the AHIMS Register. Section 84 of the NPW Act defines Aboriginal Places as “in the opinion of the Minister, is or was of special significance with respect to Aboriginal culture.” As to what constitutes ‘special significance’, guidance can be sought from both the AHIMS listing of Aboriginal Places and the OEH *Aboriginal Places Policy* (2011) (‘APP’).

A comparative review of declared Aboriginal Places in northern New South Wales has also been undertaken during this assessment. The closest Aboriginal Place is the Capeen Mountain, approximately 38 km north of the project area. Capeen Mountain is a natural mythological site and dominant physical feature of the area, with no Aboriginal Objects associated on the site record. Other places on the far north coast of NSW are:

- Casino Bora Ground: One of the largest Bora Grounds in the region and extensively documented. Unfortunately now destroyed.
- Cubawee: the historic self-managed Aboriginal settlement of Cubawee, with considerable material remains
- Parrots Nest: a sacred place including: Sacred hoop pine trees, rock engravings, stone arrangements, rock paintings, axe grooves and fallen carved trees
- Wellington Rock / Woolool Wooloolni: a natural feature of spiritual importance, with no Aboriginal Objects associated on the site record
- Chinamans Creek: a former ceremonial site
- Yabbra Spring: a natural mythological site with no Aboriginal Objects associated
- Tooloom Falls: a natural mythological site relating to the story of the creation of the Clarence River
- Ti Tree Lake: a sacred women’s site and mythological place
- Cocked Hat Rocks: a natural mythological site.

A common feature of all but one of these places is that their significance was derived well before European contact.

The review of OEH policy and previous declarations for Aboriginal Places in the region demonstrate that, on the evidence available, it is highly unlikely that the Big House or the Birthing Place would reach the threshold for being declared an Aboriginal Place. There is no other legislative protection afforded to intangible heritage places in New South Wales, other than the general discretion of the consent authorities and planners to consider impacts to Aboriginal cultural heritage.



10.2 Statement of cultural significance

The project area is situated within a highly significant and well documented cultural landscape to the Aboriginal people of the Tabulam region. Prior to European settlement, the project area and surrounds contained numerous camp grounds, ceremonial areas, traditional burial areas and mythological places. The area was rich in resources, with people having seasonal access to fish, wallaby, ducks, fruit bats, eels, turtles, mussels and many more food sources. The flat river terraces of the region made ideal camping sites as people moved about their 'country'.

Whilst most of the archaeological evidence will have been destroyed, the intangible (non-physical) significance remains. In particular, surrounding the project area are places of high cultural significance to the persons consulted in this assessment. All are related, being the Big House, the Birthing Place and the ceremonial ground. These are places of historic (post European settlement) significance. The project will not impact on these areas.

11. Conclusions and recommendations

11.1 Archaeological method

It is the opinion of the Consultant that direct impact or harm to physical Aboriginal cultural heritage is unlikely to occur as a result of construction of the proposed final route alignment.

Given the extensive ground disturbance of the project area, the lack of physical aboriginal cultural heritage recorded during the survey and a review of the archaeology and land use patterns of the region, the Consultant is of the opinion that the commencement of PACHI stage 3 is not warranted. Congruent with the requirements of PACHI stage 2, Everick notes that while harm to physical Aboriginal cultural heritage is unlikely, the mitigation measures in 11.3 should be implemented to ensure that the potential for harm is minimised.

11.2 Mitigation measures

The following mitigation measures form part of the archaeological methodology for the minimisation of harm to Aboriginal cultural heritage values in the project area. While we note that impact or harm to Aboriginal Objects is unlikely, the following cautionary recommendations should be implemented to protect Aboriginal cultural heritage values for the Tabulam area.



Recommendation 1: cultural inductions

It is recommended that the Proponent engage a representative of the Jubullum LALC or appropriate other knowledge holders to provide a cultural heritage induction to all plant operators undertaking initial ground disturbance within the Project area. The induction should, as a minimum, cover:

- Basic legislative requirements, including fines for the destruction of Aboriginal cultural heritage
- A discussion on traditional Aboriginal culture, and why the management of Aboriginal cultural heritage is important to Aboriginal peoples
- An introduction on how to identify Aboriginal objects
- A description of portions of the Project area considered likely to contain Aboriginal Objects
- A review of the Find Procedures for the Project (See Recommendation 2).

Recommendation 2: finds procedure

It is recommended that if it is suspected that Aboriginal material has been uncovered as a result of development activities within the Project area:

- Work in the surrounding area is to stop immediately
- A temporary fence is to be erected around the site, with a buffer zone of at least 10 metres around the known edge of the site
- An appropriately qualified archaeological consultant is to be engaged to identify the material
- If the material is found to be of Aboriginal origin, the Aboriginal community is to be consulted in a manner as outlined in the OEH guidelines: *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010).

Recommendation 3: Aboriginal human remains

It is recommended that if human remains are located at any stage during earthworks within the Project area, all works must halt in the immediate area to prevent any further impacts to the remains. The location where they were found should be cordoned off and the remains themselves should be left untouched. The nearest police station, the Jubullum LALC and the OEH Regional Office, Coffs Harbour are to be notified as soon as possible. If the remains are found to be of Aboriginal origin and the police release the scene, the Aboriginal community and the OEH should be consulted as to how the remains should be dealt with. Work may only resume after agreement is reached between all notified parties, provided it is in accordance with all parties' statutory obligations.



It is also recommended that in all dealings with Aboriginal human remains, the Proponent should use respectful language, bearing in mind that they are the remains of Aboriginal people rather than scientific specimens.

Recommendation 4: notifying the OEH

It is recommended that if Aboriginal cultural materials are uncovered as a result of development activities within the Project area, they are to be registered as Sites in the Aboriginal Heritage Information Management System ('AHIMS') managed by the OEH. Any management outcomes for the site will be included in the information provided to the AHIMS.

Recommendation 5: conservation principles

It is recommended that all effort must be taken to avoid any impacts on Aboriginal Cultural Heritage values at all stages during the development works. If impacts are unavoidable, mitigation measures should be negotiated between the Proponent, OEH and the Aboriginal Community.



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Appendix a: historic imagery & plans



Figure 12 Lean-to bark shelter: erected near Tabulam Village c. 1890 (National Library of Australia).



Figure 13 Cleared River Terraces: south of the project area, c. 1886 (National Library of Australia).

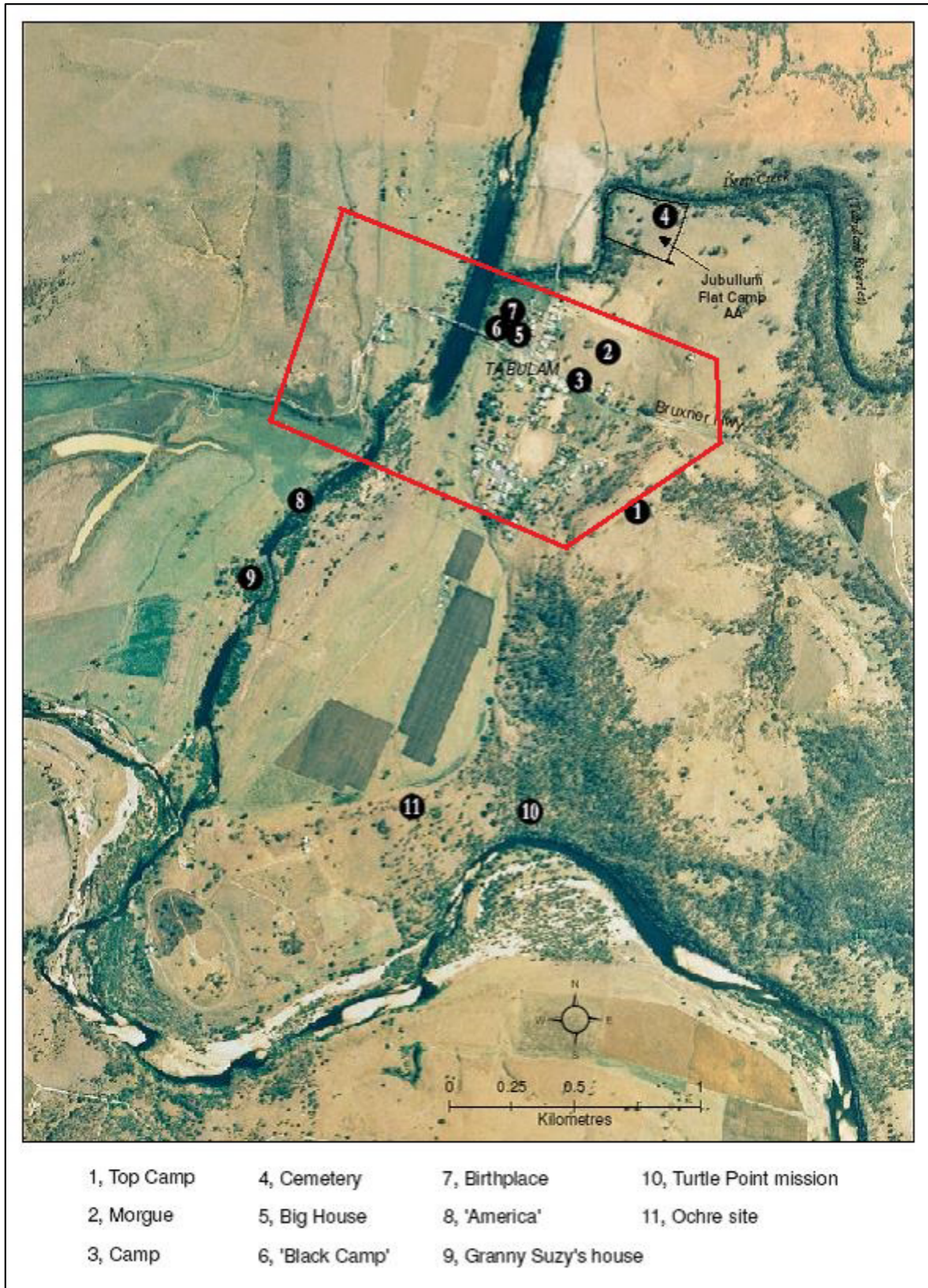


Figure 14 Plan from the Jubullum Flat Management Plan (Figure 1): depicts significant places to the Aboriginal people of Tabulam (Note items 6 'Black Camp' and item 7 'Birthplace')

Appendix b: AHIMS search results

SiteID	SiteName	Datum	Zone	Eastng	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
03-6-0009	Tabulam 1	AGD	56	458000	6804000	Open site	Valid	Burial : -	Burial/s	
	Contact	Recorders		Isabel McBryde					Permits	
03-6-0058	Restriction applied. Please contact ahims@environment.nsw.gov.au.	Recorders		David Major		Open site	Valid	Aboriginal Ceremony and Dreaming : -	Natural Mythological (Ritual)	
	Contact	Recorders		Mr. Ashley Moran					Permits	
03-6-0008	Tabulam Njumbun Cave	AGD	56	458000	6803000	Open site	Valid	Art (Pigment or Engraved) : -	Shelter with Art	
	Contact	Recorders		Isabel McBryde					Permits	
03-6-0012	Old Mission Cave	AGD	56	459000	6803000	Closed site	Valid	Artefact : -		
	Contact	Recorders		Ray Kelly					Permits	
03-6-0074	LT Open Site 1 with PAD	GDA	56	458545	6805411	Open site	Valid			
	Contact	Recorders		Ben Churcher/Ozark Cultural Heritage Management					Permits	

Report generated by AHIMS Web Service on 07/08/2013 for Genna Mateni for the following area at Datum :GDA, Zone : 56, Eastings : 456982 - 458607, Northings : 6804170 - 6804583 with a Buffer of 1000 meters. Additional Info : Doing search on behalf of Caroline Ingram. Number of Aboriginal sites and Aboriginal objects found is 5
This information is not guaranteed to be free from error omission. Office of Environment and Heritage (NSW) and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.



Appendix c: historic aerial photography

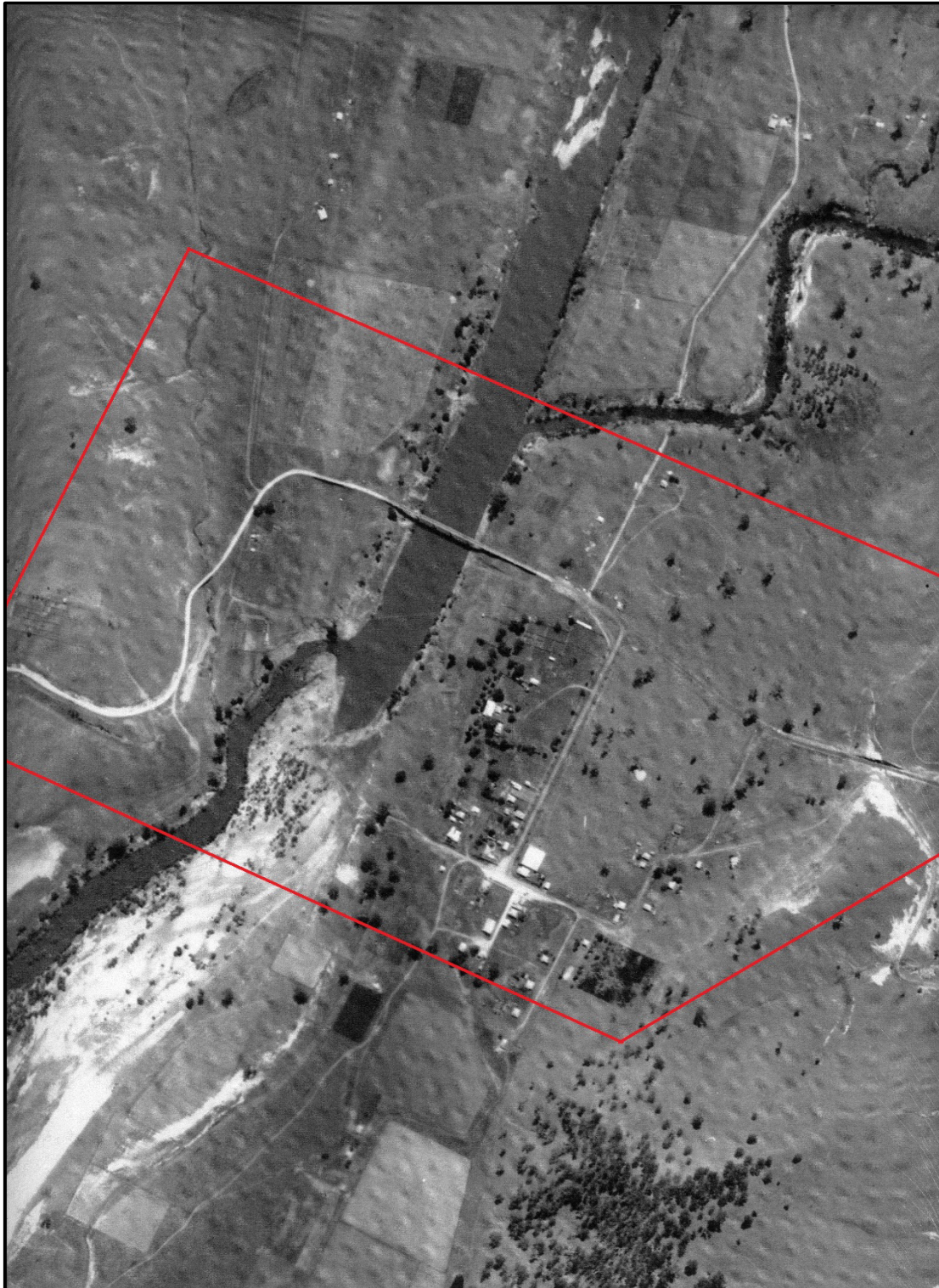


Figure 15 1948 Historic Aerial Photograph: depicts town of Tabulam at the time of production, with the project area superimposed.



Figure 16 1963 Historic Aerial Photograph: depicts town of Tabulam at the time of production, with the project area superimposed.



Figure 17 1975 Historic Aerial Photograph: depicts town of Tabulam at the time of production, with the project area superimposed.



Figure 18 1987 Historic Aerial Photograph: depicts town of Tabulam at the time of production, with the project area superimposed.



Figure 19 1997 Historic Aerial Photograph: depicts town of Tabulam at the time of production, with the project area superimposed.

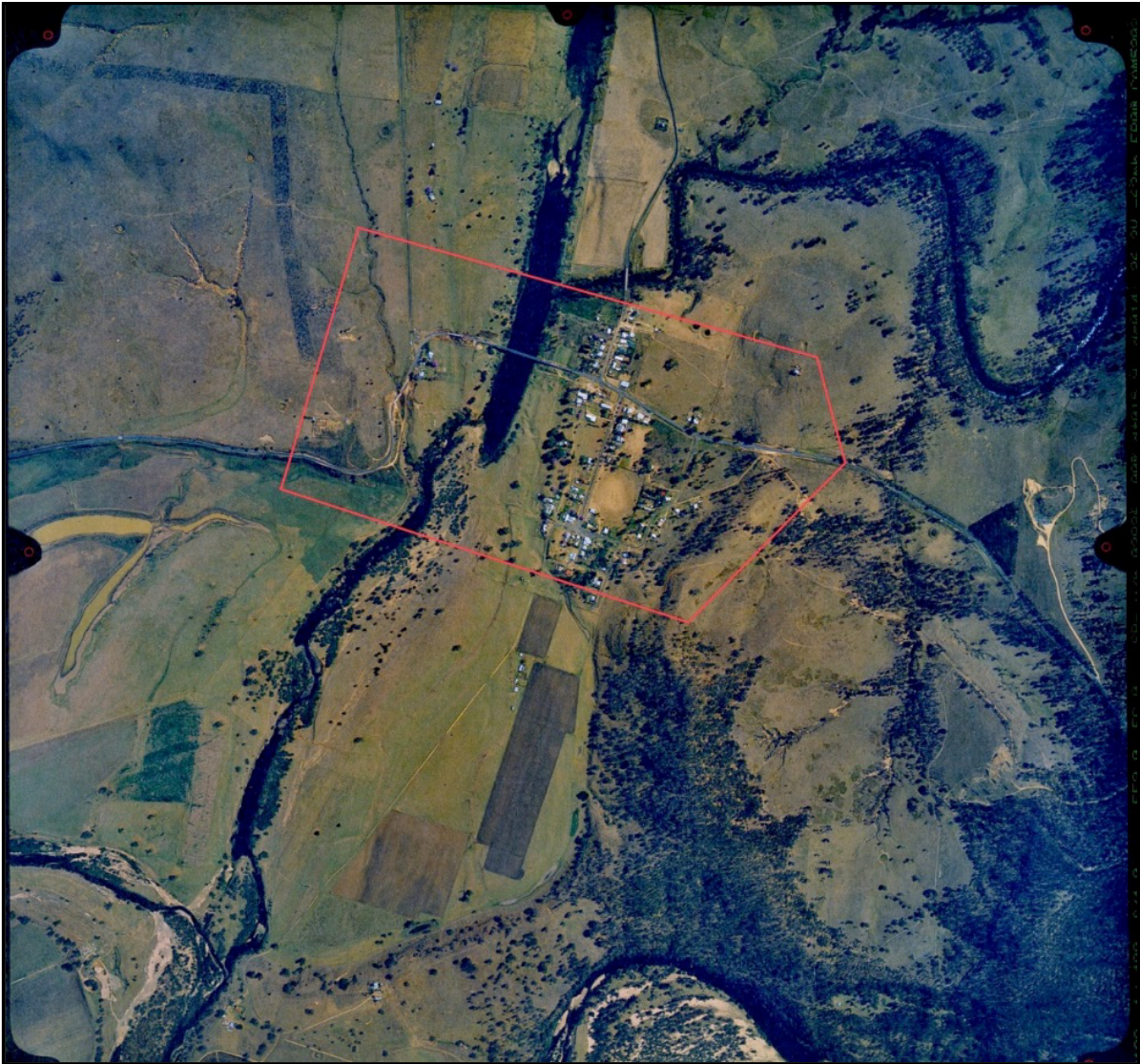


Figure 20 2000 Historic Aerial Photograph: depicts town of Tabulam at the time of production, with the project area superimposed.

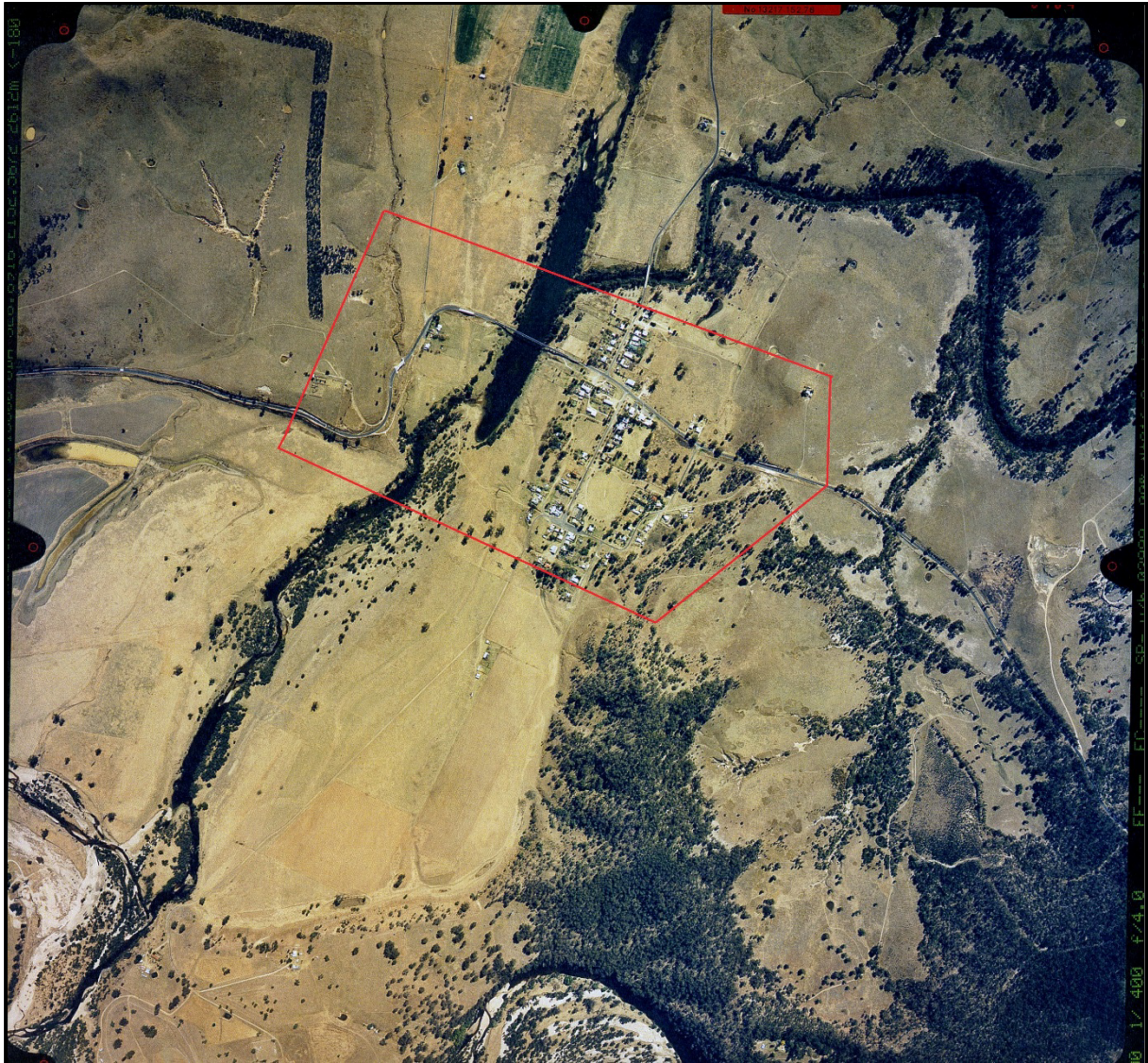


Figure 21 2004 Historic Aerial Photograph: depicts town of Tabulam at the time of production, with the project area superimposed.



Appendix d: parish maps

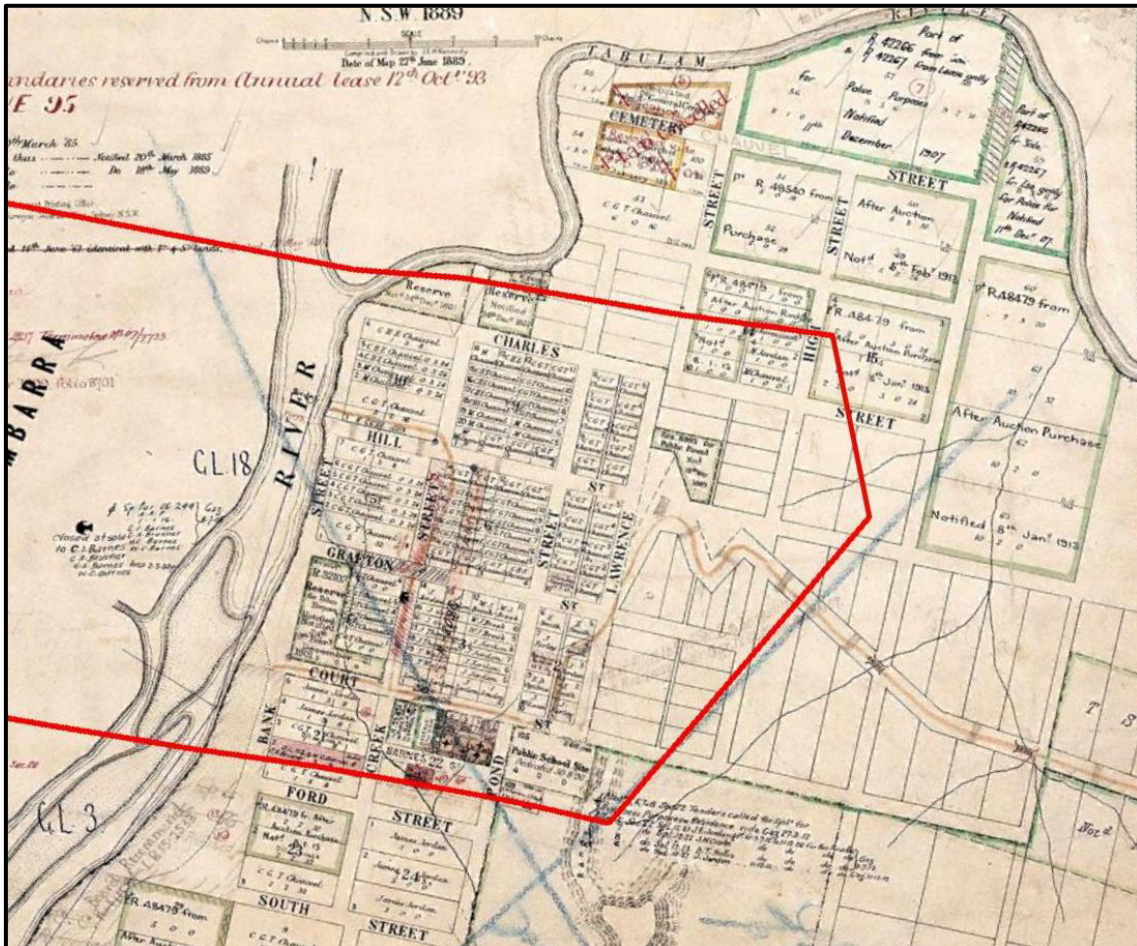


Figure 22 1889 Parish Map: depicts town of Tabulam at the time of production, with the project area superimposed.

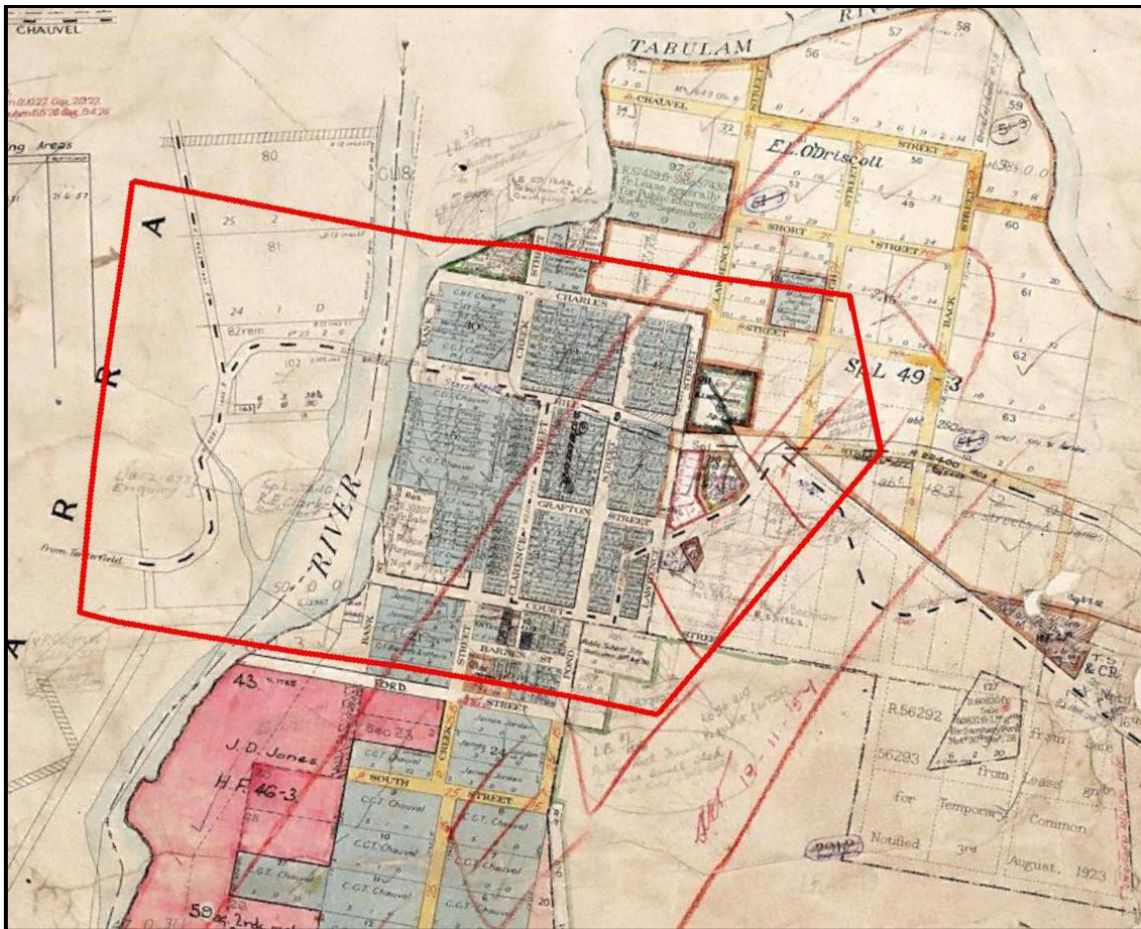


Figure 23 1915 Parish Map: depicts town of Tabulam at the time of production, with the project area superimposed.

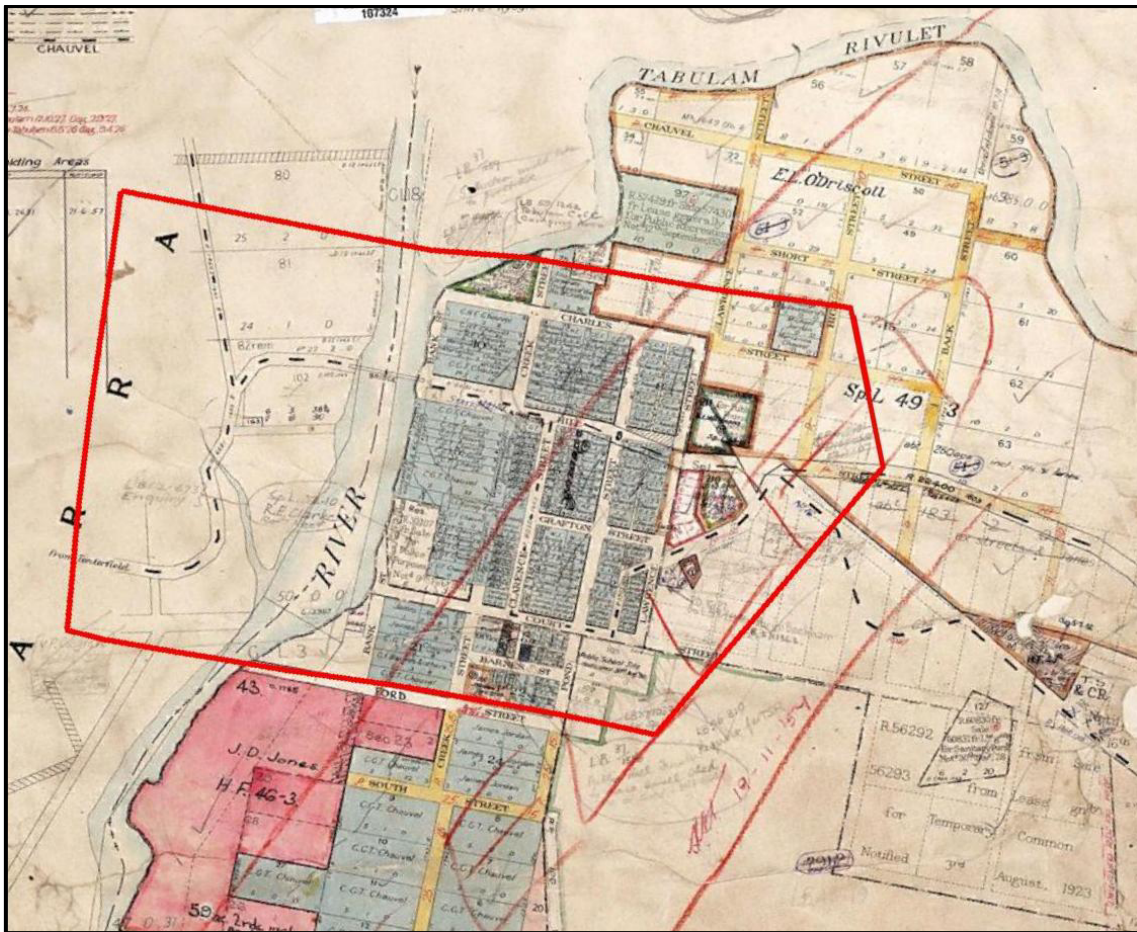


Figure 24 1932 Parish Map: depicts town of Tabulam at the time of production, with the project area superimposed.



Appendix e: Native Title search results



11 December 2013

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Our Reference: EV.282
Your Reference: 5910/13DD

Dear Mr Robins

Native Title Search Results for Clarence Valley Council local Government Area

Thank you for your search request received on 4 December 2013 in relation to the above area.

Search Results

The results provided are based on the information you supplied and are derived from a search of the following Tribunal databases:

Register Type	NNTT Reference Numbers
Schedule of Applications (unregistered claimant applications)	Nil
Register of Native Title Claims	NC2011/005 Western Bundjalung People NC1996/038 Yaegl People NC2011/001 Yaegl People #2
National Native Title Register	NC1996/016 Bandjalang People #1 NC1998/019 Bandjalang People #2
Register of Indigenous Land Use Agreements	Nil
Notified Indigenous Land Use Agreements	Nil

I have enclosed the register extracts and maps to help guide your understanding of the search results.

Please note that there may be a delay between a native title determination application being lodged in the Federal Court and its transfer to the Tribunal. As a result, some native title determination applications recently filed in the Federal Court may not appear on the Tribunal's databases.





The search results are based on analysis against external boundaries of applications only. Native title applications commonly contain exclusions clauses which remove areas from within the external boundary. To determine whether the areas described are in fact subject to claim, you need to refer to "Area covered by claim" section of the relevant Register Extract or Application Summary and any maps attached.

Search results and the existence of native title

Please note that the enclosed information from the Register of Native Title Claims and/or the Schedule of Applications is **not** confirmation of the existence of native title in this area. This cannot be confirmed until the Federal Court makes a determination that native title does or does not exist in relation to the area. Such determinations are registered on the National Native Title Register.

Tribunal accepts no liability for reliance placed on enclosed information

The enclosed information has been provided in good faith. Use of this information is at your sole risk. The National Native Title Tribunal makes no representative, either express or implied, as to the accuracy or suitability of the information enclosed for any particular purpose and accepts no liability for use of the information or reliance placed on it.

If you have any further queries, please contact me on 1800 640 501.

Yours sincerely

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Enclosed Register extracts